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ACCESSIBILITY TO POSTSECONDARY EDUCATION IN CANADA



*A Review of
the Literature*

Canada

ACCESSIBILITY TO POSTSECONDARY EDUCATION IN CANADA:

A Review of the Literature

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with
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FOREWORD

Accessibility to Postsecondary Education in Canada: A Review of the Literature one of a series of reports published under the auspices of the Education Support Branch of the Department of the Secretary of State, relating to educational statistics. It was commissioned as a literature review to complement the analysis of the Postsecondary Student Survey conducted by Statistics Canada for the department in the spring of 1984. The views expressed in this report are those of the authors and do not necessarily reflect the views of the Secretary of State.

PREFACE

In 1967, I was commissioned by the Association of Universities and Colleges of Canada to prepare a report on "Access to University Education in Canada." The decade of the sixties was an optimistic and buoyant one for Canadian universities. They were growing rapidly, and governments were willing to reach deeply into the public purse in order to fund their growth. However, there was some concern at the time that the flood of young people into the universities - the investment in "human capital" in the economic jargon of that time - had not necessarily been accompanied by any major reduction in social inequalities in the opportunity for access to higher learning. Hence, the AUCC's request for a thorough review of the relevant Canadian literature in the field, and for some assessment of the impact of the newly established student financial aid programs. The request sounded simple to fulfil but proved, in practice, to be almost Herculean. I quickly found out that the sum of Canadian research on issues of accessibility and educational opportunity was limited; that detailed information on student financial aid could only be obtained by direct contact with the appropriate provincial ministries; in short, that a project scheduled to be completed in six months had to be extended to two years. It was indicative of the AUCC's generosity that they continued to foot the bills while the work went on.

My report was published in 1970. It is understandable, therefore, that I should take particular pleasure in writing the preface to this study because it provides the first major national and regional overview of the Canadian literature on accessibility to postsecondary education to be undertaken during the 15-year interval. During these intervening years, however, Canadian developments in postsecondary education have been dramatic, and - in some aspects - disturbing. On the positive side, the non-university postsecondary sector, which was in its infancy in most provinces in the late 1960s, has become an important institutional alternative to university studies for many young people (though the extent of its development remains uneven between provinces and regions). Positive also is the substantial growth in the participation of women in

higher education and, though recognizing Marie-Andrée Bertrand's concerns about trends in part-time enrolment in Quebec, one can generally welcome the expanded opportunities for part-time learning. What is disturbing, however, is that the erstwhile willingness of governments to provide generous funding for higher education has been replaced by an emphasis upon financial retrenchment and constraint; this threatens some of those cherished gains in increased opportunities for higher learning that have been made in the past two decades. The mood of the time was caught in the theme of the recent national conference convened by the Canadian Association of University Teachers: "Access to the University: Why Are the Doors Closing?" No one attending the conference seriously questioned that the doors were beginning to close for many high school matriculants whose grades, if not outstanding, would previously have been high enough to gain them university admission. Indeed, many conference participants voiced the fear that among these excluded matriculants would be found disproportionately large numbers of young people from lower-class and disadvantaged ethnic minority backgrounds: precisely those groups still underrepresented in the Canadian university system.

For a number of reasons, therefore, this study is published at an appropriate time. First, amid the growing anxiety and rhetoric, Paul Anisef and his co-authors offer us a balanced, rational appraisal of the major national, and regional, trends in accessibility to postsecondary education, and underscore the prevailing concerns in the field of access policies. On the whole, while the authors may hold strong opinions about the virtues of particular trends and policies - and clearly some of them do - they are not opinionated: that is, we can draw our own conclusions from what they have to say. Thus, after reading the study, my most general conclusion is that the continued social inequalities in access to higher education which it reveals should afford Canadians little cause for complacency: and certainly not the kind of complacency which would accept without strong reservations the commonly expressed view that this country can no longer meet the economic costs of its relatively open postsecondary systems. One finds, all too often, that this view is combined with a nostalgic image of Canadian higher

education as it was around 1950; that is, academic university study offered to a small intellectual and social elite, the great majority of whom were males.

Since I am becoming opinionated myself, let me turn quickly to some other reasons for the topicality of this study. The reader will note from its comprehensive and valuable bibliography that the earlier paucity of relevant Canadian research on access to postsecondary education has now been replaced by a fair abundance of data and documentation which it is one of the primary purposes of the authors to review. However, many items in this growing body of literature are based upon survey research carried out in a particular province (rather than being supra-provincial or national in scope) and, for this reason, they are not necessarily well known, or widely referred to, by scholars or policymakers who reside elsewhere. One case in point is the Alberta Participation Patterns Study which features prominently in Ulrike Hortian's account of accessibility in the Western Provinces. Another is the major ASOPE project in Quebec which constitutes a vital source of documentation in Marie-Andrée Bertrand's chapter, but which is not very familiar to anglophone scholars outside Quebec. Thus, in offering the first major overview of the Canadian literature in many years, the study performs a valuable function in bringing to the attention of a potentially wide scholarly audience, the actual richness and diversity of research on access to higher learning in this country. One should recognize, of course, that this richness and diversity is not evenly distributed across all provinces and regions. More particularly, the absence of a chapter on accessibility in the Atlantic Provinces is, one gathers, partly a consequence of the still limited body of data on patterns and processes of access in that region.

The lacuna of the Atlantic Provinces could perhaps have been avoided if the existing structure of the study - that is, a national overview followed by chapters devoted to particular provinces and regions - had been replaced by one that focused upon specific access issues each of which could have been reviewed on an "across-the-nation" basis. However,

had this been done, it would have obscured the importance of historical and contemporary variations in the social and educational experiences of the different parts of Canada. In particular, the present structure allows for highlighting regional variations in the significance ascribed to specific access issues such as language group and higher education in Quebec, social class and educational opportunity in Ontario, and the urban-rural gap in opportunity structures in some Western Provinces. These regional variations - indeed "agenda priorities" - in the foci of research on accessibility are an important finding of this study. In my opinion, Dr. Anisef and his co-authors have themselves made a significant contribution to the Canadian literature on access to higher learning by revealing them to us.

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INTRODUCTION

The course of Canadian higher education contains many important episodes and several phases that are worth noting. Universities grew at a slow but steady pace until 1940 when they numbered 21. World War II began a new era for this global war generated a high demand for scientific research and highly trained personnel and it was the university community that demonstrated its vital importance in meeting such technological demands. Starting in 1951, the federal government became involved in the provision of financial support to higher education on a regular basis.

By the early 1950s the size of the university student population was twice that in 1940. Twenty-three years later another doubling had taken place.

Perhaps the most exciting and optimistic phase of postsecondary development occurred over the past 20 years. Full-time undergraduate enrolments tripled and part-time graduate and full-time graduate enrolments experienced close to a sixfold increase. Statistics Canada recently reported that the number of postsecondary students, aged 15-24, attending university and college jumped a startling 26% between 1980 and 1983, reversing a three year downward trend. Expenditures on university education increased by a factor of 14; in 1981-82 \$4,989 million were spent on Canadian universities. Growth in the postsecondary non-university sector (e.g. community colleges) has been equally extraordinary.

Policies to foster the growth of higher education, initiated in the 1960s, was not just a response to the pressure of numbers. It was motivated by the belief, endorsed by economists, that higher education was a key to economic productivity and would yield higher rates of economic returns for both individuals and society than other forms of investment.

Social justice or providing equality of opportunity formed the second, important rationale. Canadians became convinced that schools (especially universities) offered a direct route to increased social

mobility. Improving accessibility to higher education was seen as a major means of accommodating rising social aspirations and of improving the economic prospects of disadvantaged social, cultural and regional groups.

Schools were increasingly viewed as "great equalizers" and Lockhart (1975:197) points out that:

...the state became increasingly committed to a binding contract with those who accepted the new mobility norms. The terms of this contract, though unwritten, were well understood. On the one hand, those who wished to succeed within the institutional norms of the corporate state agreed to accept a narrow, sometimes irrelevant, often alienating and increasingly prolonged educational confinement as the price paid in youth for privilege in later life. On the other hand, the state not only guaranteed access to higher education on demand...but...also implicitly underwrote the availability of the appropriate jobs to all those who achieved certification.

Questioning Access

Many now believe that this 'contract' has been broken. One observer commented "...to almost everyone's surprise, the 1970s were ushered in not with the happy statistics of high rates of educationally-propelled mobility, but rather with the bitter evidence of graduate underemployment spilling over into outright unemployment" (Lockhart, 1977:80). It is important to note that the concern, in recent decades, with the issues of educational equality and access is not unrelated to the growing vocationalism of education during the past 80 years, that is, its increasingly close tie-in to the labor market via credentialism and a reliance on formal gratifications. In the late 19th century the relevance of education to labor market needs was limited since the majority of Canada's population were engaged in agriculture.

Higher education in the 1980s has entered a decade of scarcity. Universities and colleges are beset by a series of crises which began in the '70s when higher education began to lose its institutional prominence. High costs and a loss of confidence in the validity of the assumptions guiding expansion contributed to this. Various studies revealed (or were perceived to reveal) substantial increases in unemployment and underemployment among those earning a B.A. degree (Zsigmond et al., 1978). Given the mushrooming costs associated with supporting the vastly

expanded university system, decreases in social mobility for university graduates were seen as indices of inadequate university performance.

The high costs of postsecondary education, lower rates of personal returns from the investment in higher education and unfavorable media coverage are some of the factors that have challenged the viability of promoting universal access to higher education in recent years. Rationality and accountability are now familiar buzzwords in Canadian society and universities are being asked to streamline or cut programs while maintaining or even increasing the quality of programs.

Critics of higher education frequently link the continued promotion of accessibility with decreases in quality. The recent United States National Commission on Excellence in Education was mandated to explore "efforts that could and should be taken to foster higher levels of quality and academic excellence in the nation's schools, colleges and universities (emphasis added) (Finn, 1984). This quote reflects the sentiment in the United States (and increasingly in Canada) that significant numbers of students are now being admitted into university who lack the intellectual readiness and motivation for higher education. Although some of the responsibility for their presence in higher education may be attributed to inadequate preparation at the secondary level, open admissions policies and active recruitment of 'warm bodies' also account for a significant proportion.

Critics also point out that the unparalleled expansion of higher education has not had the intended democraticizing results. From the perspective of participation rates, Canada has fared well compared with other nations. Only the United States and Sweden can claim higher rates for their 18-24-year-old groups. Women too have made significant inroads in decreasing the participation gap with men, particularly at the undergraduate level. Canadian data reveal, however, that education expansion has not measurably reduced existing social class differentials (Anisef et al., 1982).

Those who question the influence of education expansion (at the secondary and postsecondary levels) on significantly increasing the economic and social opportunities of disadvantaged Canadians find support in the research conducted by social scientists. Major studies in the

United States (Coleman, 1966; Jencks, 1972) have demonstrated that schools only marginally account for differences in adult earnings and that a large proportion of individual differences in educational attainments are consistently accounted for by non-scholastic (social and cultural background) factors.

Additional support for challenging the general notion of beneficial consequences of access are derived from a close scrutiny of the schooling process. How can school act as an equalizer when it is mandated to identify and legitimate distinctions based on performance levels? With the coming of the post-industrial society (in which theoretical information and technology are of central importance), the basis for stratifying people switches from inheritance based on ascribed characteristics to a form of meritocratic inheritance. Adults who attain advanced certification in such fields as administration technology, science and communication become the new meritocratic elites and pass on these prerogatives to their children.

Defining and Measuring Access in Canada

Definitions

Dr. Michael L. Skolnick, chief rapporteur at the 1982 Council of Ministers of Education, Canada (CMEC) conference in Toronto, noted that accessibility can have a variety of different meanings and connotations and he introduced a useful distinction for distinguishing two main ways in which the concept has been employed (1984: 228-229):

Type I accessibility pertains to variation among individuals or groups with respect to their chances of getting into postsecondary education. If the probability of getting into postsecondary education is the same for all individuals, then Type I accessibility is maximized, whether that probability is high or low.

Type II accessibility pertains to the average probability over the entire population, or the population interested in postsecondary education, or some relevantly defined population, that is, the average probability of getting into postsecondary education. The higher the average probability, the greater is Type II accessibility.

These two types or two ways of looking at accessibility are obviously interrelated. For example, a measure which reduced Type II accessibility, such as quotas, would likely result in a

reduction of Type I accessibility. Alternatively, it may at times be impossible to increase Type II accessibility without removing some of the barriers for particular categories of individuals, therefore, without increasing Type I accessibility.

Peter M. Leslie in Canadian Universities 1980 and Beyond acknowledges the importance of Type I accessibility but focuses almost exclusively on Type II in analyzing university participation rates. He argues that

In Canadian education, the main emphasis has been on minimum standards and universal accessibility rather than on building universities with a world reputation. In the result, there has been dispersal of resources, which makes specialization difficult and militates against the attainment of excellence, particularly in research.

Leslie reports that educational philosophy in Canada has been in one respect more elitist than in the United States, and in another, more equalitarian. The very structure of the postsecondary sector has reflected this philosophy. Thus, there's been some insistence on distinguishing academic and "applied arts" or technical programs. Only in Alberta and British Columbia do institutions offer both type of programs (Leslie, 1980:61).

Although initially committed to the development of universities to extend access (while maintaining or raising standards of instruction) provincial governments are now oriented to saving money by rationalizing university systems (Leslie, 1980:58).

Measuring Access

Whether one chooses to examine an entire society or specific sub-groups within that society, the evaluation of whether progress has been made will inevitably become a critical question. Three facets of progress should be borne in mind when we pose the following questions: Has there been progress over time e.g. an increase in participation rates for the society or some important group such as women? What progress has occurred relative to other societies or sub-groups? For example, have women closed the full-time university participation gap with men - in Canada? in each province? Has there been progress at different levels?

Thus, while women have narrowed the distance (re participation in university) between themselves and men, have they experienced similar progress with reference to the selection of non-traditional fields or programs of study? We suggest that these sorts of questions are important strategically in understanding accessibility to universities and colleges.

The most frequently employed index of educational opportunity at the postsecondary level is the participation rate (calculated by dividing total university or total postsecondary full time enrolment by the relevant age group - usually 18-24). Such rates are susceptible to distortion, especially when conducting interprovincial and cross-national comparative analyses. The reader should note these distortions in interpreting tables provided throughout this report. They include: (1) the presence of over 24s in the university or college population, which inflates participation rates (thus an increased stress on recurrent education for mature, part-time students would influence participation rates); (2) the use of the 18-24 age group does not take sufficient account of provincial differences with regard to age of entry; (3) participation rates include foreign students and changes in their enrolment within Canadian postsecondary institutions will affect the measured participation rate; (4) the participation rate does not capture students studying in postsecondary institutions outside Canada; (5) some students attend postsecondary institutions outside their home province; this does not affect Canadian rates but does have a noticeable effect on measuring provincial rates (particularly in Nova Scotia and Prince Edward Island) (Vanderkamp, 1984: 4-6); (6) counting the participation of part-time students in a rate is a tricky problem.

Summary

The strong emphasis placed on encouraging access to higher education in the 1960s is being challenged in the 1980s. Increased economic productivity and the pursuit of social justice were key objectives underlying the emphasis on access and critics today are challenging the success of postsecondary institutions (and universities in particular) in achieving these objectives. Evidence demonstrating unemployment and

underemployment among graduates and documentation illustrating the continuing elite composition of Canadian universities are frequently used to question continued support of universal access policies. Escalating costs in maintaining universities and colleges, especially in hard economic times, also figure importantly in this challenge.

Any literature review of knowledge and issues about access should clearly spell out the complex meanings of the concept and the available methods for operationally defining the concept. Our discussion of these areas reveals two major perspectives in defining access: (1) examining the average probability of enrolling in university or college over an entire population and (2) a social stratification perspective that focuses attention on variations across groups of persons possessing common characteristics (e.g. sex, language, socioeconomic status).

Organization of the Report

Chapter one consists of a brief explanation of the social stratification perspective. This perspective is presented to enable the reader to organize the research materials related to sex, language, socioeconomic status (SES), age and region presented in Chapter 3. Relevant statistics on universities and colleges that portray important changes in postsecondary participation rates as well as regional variations are presented throughout the report.

Our second chapter consists of a specific and detailed discussion of perspectives and positions taken by faculty associations (e.g. Canadian Association of University Teachers (CAUT)), student organizations and government. Finally, we present the view on access from a comparative or international perspective (e.g. The Organization for Economic Cooperation and Development (OECD)).

Chapter 3 contains a brief portrait of educational similarities and differences across the provinces, a review of national studies relevant

to postsecondary access, a treatment of visa students¹ and a brief analysis of the impact of high technology on student access.

Chapters 4-6 each contain regional or provincial treatments of accessibility. Chapter 4, written by Carl E. James, presents a treatment of accessibility in Ontario; Chapter 5 written by Prof. Marie-Andrée Bertrand, analyzes accessibility in Quebec; Chapter 6 (written in part by Ulrike Hortian) explores accessibility in the Western Provinces. Unfortunately it was not possible to obtain an analysis of accessibility in the Atlantic Provinces. However, readers should note that enrolment statistics concerning the Atlantic Provinces are presented in Chapter 3. In addition the general bibliography contains references to research on access in these provinces. Readers wishing information on access in the Atlantic Provinces may contact Professor Norman Okihiro, Department of Sociology, Mount Saint Vincent University.

It should be noted that while these chapters reflect the writers' perspectives on accessibility, issues relating to the latter vary substantially across Canada. Thus, the perceived role and impact of social class, region, ethnicity and governmental administrative bodies vary substantially across provinces. Naturally, this affects how accessibility is viewed, whether and how it is researched and who does the research. Chapter 7 offers a series of conclusions based on our review of access in Canada; these conclusions are followed by prospects for future lines of research on access.

¹Carl E. James was responsible for developing the section on foreign visa students.

1 THE SOCIAL STRATIFICATION PERSPECTIVE

Individuals and groups in society strive to maintain and advance their positions relative to others. As a consequence of competing for scarce resources or rewards (e.g. wealth, prestige, power) hierarchical distinctions emerge among people. Social stratification consists of inherited and socially constructed hierarchical distinctions that develop among persons in a given society. In other words, all societies are characterized by structural inequalities. Furthermore, these inequalities have multiple roots and Canada can thus be described as possessing a complex stratification system in which hierarchical distinctions or inequalities appear in a variety of guises - class, ethnic, sexual, religious, and political.

Socioeconomic status or social class is viewed by most social scientists as the single most important basis or overriding feature of social stratification in postindustrial societies. Occupational position, in turn, serves as a crucial factor in identifying one's hierarchical position in a society's class stratification system. Education is one of the final pieces that completes this puzzle. As societies become technologically more complex and sophisticated, occupational training occurs increasingly outside the context of the family. Therefore, the sheer amount of formal education attained by persons increasingly influences their occupational choices.

A social-stratification perspective alerts us, not only to the marked hierarchical differentiation that characterizes Canada, but also to inequalities in opportunity. Although it is true that opportunities for improvement or social mobility exist in Canada, there also occurs a considerable inheritance of disadvantage. This tendency for families to pass on social and economic advantages (or disadvantages) to their children makes the provision of equality of opportunity problematic. Even if the impact of socioeconomic stratification were to be disregarded, inequalities in opportunity are frequently associated with residence patterns, ethnic group membership, and gender.

A key distinction in examining inequalities in educational opportunity, both conceptually and empirically concerns the level of analysis

adopted. More specifically, it may be asked whether the basic unit employed should be the "individual" or the "group." The late Canadian social scientist John Porter (1979:254) identifies the ramifications of using either approach:

An important difference in the treatment of equality between Jencks and Coleman is that the former deals with large aggregates of data to demonstrate inequality between individuals, whereas the latter deals with inequality between groups and is concerned to equalize group averages. For example, we might in this country be concerned with equality among all Canadians or we might be concerned with equality among English, French, and others. Thus if all three groups had equal average income, equal average years of schooling and so forth, the Coleman model of equality would be met even though within each group inequalities existed. In the Jencks model of equality, which is fairly extreme, individuals are not classified into groups, but are all considered together, and they must all be near the average. The difference between the two approaches to measuring inequality is not simply methodological. The Coleman model says equality is met if there is no discrimination because of group membership. For example, women and men are equal in the labor force when their average rates of pay are the same. Jencks would say they must all be considered together to calculate the average and must all be near it.

Two major perspectives have been employed in the sociology of education for providing explanations of who goes to university and then graduates (Richardson, 1977). The functionalist view posits a liberal perspective wherein individuals compete fairly for scarce resources (e.g. income, power) according to universalistic standards. The ideological assumption associated with the functionalist perspective is that of individualism; the stress is on achieving equality of educational opportunity through removing external barriers (e.g. geographic location, economic background). Once barriers are eliminated, the individual is expected to (aggressively) take advantage of available educational opportunities. This perspective was strongly reinforced by theories of "human capital" that emerged in the late 1950s.

A more critical orientation emerged in the 1960s; this basically challenged the assumption that a dramatic expansion of public education could measurably improve equality of educational opportunity. This perspective (referred to as neo-Marxist, radical revisionism, or conflict) stressed the role of public education in replicating, exacerbating, and legitimizing structural inequalities in the society at large. Education,

rather than being an autonomous, reforming force, really served the interests of dominant social strata (Pike, 1980:109). This view re-awakened interest in superordinate-subordinate power relationships among social groups in the society. At the same time, it illustrated the importance of adopting a more general social-stratification perspective in evaluating the relative success of societies in reducing inequalities in opportunity and condition.

It is the latter perspective that will be employed in this report to review studies on accessibility to higher education. In particular, we will be concerned with how well (or poorly) lower socioeconomic groups, women and ethnic minority and mother tongue groups fare in achieving entry to universities and colleges.

The role of education generally and higher education specifically in promoting upward social mobility in Canada can effectively be understood through the application of the concepts sponsored and contest mobility. Sponsored mobility occurs when children are sorted early, according to criteria developed by a governing elite and streamed into occupational levels according to desired qualities. It may be compared with a series of escalators, sending children to their respective floors (Harvey and Lennards, 1973:63). These floors are terminal working-class, middle-class, or upper-class destinations rather than temporary stopoffs. By contrast, in a contest-mobility situation, children are encouraged to stay in the race as long as possible, competing with each other in a fair manner according to universalistic standards. The educational system is charged with the responsibility of identifying (on the basis of performance) those persons capable of assuming elite positions and provides a climate where curriculum choice is flexible and where ease in transferring to streams heading for postsecondary education is relative.

The movement from sponsored to contest mobility involves a shift from an elite to a meritocratic ideology, that is, the provisions of educational opportunities for all who are considered to possess the ability to take advantage of them. Certain educational dilemmas are associated with emphasizing sponsored or contest forms of mobility, sponsored mobility, with its stress on early selection, may preserve educational quality while sacrificing equality and wasting the nation's

stock of talent. Contest mobility, with its stress on later selection, may encourage the reduction of class-based inequalities and injustices while creating an (alternative) elite society based on intelligence and achievement.

Many educational researchers maintain that, in the past, Canada exhibited a sponsored-mobility pattern with its emphasis on compulsory subjects and formal streaming of students at the secondary level of education. Clements documents, for instance, the proportionately upper-social-class origins of Canadian economic elites as contrasted with their American counterparts (Murphy, 1979:115). A far greater percentage of the Canadian economic elite (41%) than the American elite (20%) attended top private schools. A crucial historical difference accounting for this contrast in sponsored mobility involved early establishment of independence from Great Britain by the United States and the continued emphasis within Canada of a British value orientation (emphasizing elitism). Neatby argues, for example, that the American and Canadian school systems, although similar in some respects were based on altogether different philosophies. The United States system stressed the concepts of "progressive education" and "training for citizenship" while Canada placed emphasis on continuity and tradition rather than change (Neatby, 1972:12). Clark argues that in Canada there has been greater control over education by the church and provincial ministries of education, and there has been the maintenance of an elitist tradition in postsecondary institutions compared with the United States (Clark, 1976). Clark further argues that a strong demand for technological skills and a highly trained labor force accompanied Canada's role of supplying materials during World War II. This led to large-scale economic changes and opportunities unrelated to changes in the educational system at that time. People made it the hard way by seizing economic opportunities in the 1940s and earlier. However, by the 1950s those who became successful constituted the basis of a broadened middle class. These persons wished to maintain their families' socioeconomic position and sought to do so by encouraging their children to enrol in university. Thus, in the middle and late 1960s an extraordinary growth of postsecondary institutions and enrolments occurred in Canada. Elitism and sponsored mobility were

viewed as obstacles and no longer tolerated. Murphy (1979:206) comments on this phenomenon:

A wider choice of subject, late separation into hierarchically ordered programs, and subjects and programs available to all were necessary to convince students that selection would be made according to individual merit and individual taste. In short, structures and content based on contest mobility and formal equality were introduced to replace those based on sponsored mobility and elitism.

Although a fair degree of consensus exists that Canada has moved toward a pattern of contest mobility somewhere between the United States and Great Britain, public education is perceived as failing in its mission to provide greater social equality (Porter, 1979:242). Claims that Canada has moved in the direction of contest mobility in the attempt to democratize education contrast with government's apparent failure to achieve parity of access across socio-economic groups in universities. This contradiction is clearly more apparent than real, however, if the relationship between equality of opportunity and contest mobility is considered more fully. Contest mobility not only requires succeeding in school subjects but also choosing the right ones for social advancement to postsecondary education (Murphy, 1979:207). This choice places an important responsibility both on the student and the family. The concept of contest mobility suggests a move toward a limited form of equality of educational opportunity and emphasizes initial equality rather than equality of results.

The explanation of the social stratification perspective presented in this section derives from a research publication entitled Losers and Winners (the findings of which will be reviewed later in this report). Basically, the argument presented by the author is that young persons in Canada selectively perceive available opportunities to participate in higher education. Furthermore, this selective perception has its roots in Canada's social stratification system. Therefore, genuine attempts to provide a more equitable distribution of higher education must deal with this social psychological problem and government should have as one of its primary objectives, reducing those learning disadvantages associated with structural inequalities experienced early in life.

2 OFFICIAL, STUDENT AND COMPARATIVE PERSPECTIVES ON ACCESS

The most effective strategy for identifying current perspectives on accessibility to higher education is through a content analysis of written media. More specifically, a number of higher education organizations e.g. the Canadian Association of University Teachers (CAUT) have published newsletters or research letters that deal with traditional (accessibility) concerns as well as new issues. These organizations frequently issue policy statements that also address some facet of accessibility. While Chapter 1 presents an academic social science perspective on access, this chapter will review official and student views toward the access issue. The chapter concludes with a brief treatment of comparative or international analyses of access to post-secondary education.

It is important to note that the media (e.g. newspapers, radio, TV) play a role in moulding public opinion on a range of university and college issues including financial cutbacks and issues of access. Little research has been conducted to evaluate the influence of media on public attitudes with reference to postsecondary access. This chapter will not focus on the media.

Federal and Provincial Perspectives

The federal view on accessibility was articulated by the Honourable Walter McLean, Secretary of State and Minister Responsible for the Status of Women on November 23, 1984 in an address to the Canadian Association of University Teachers. He specified that accessibility means availability of student assistance, providing a choice of instruction in either official language, providing the means by which the physically handicapped can have access to postsecondary education. He emphasized that accessibility means equality of opportunity "the basic tenet of fairness which requires that education will not be constrained by extraneous factors such as socioeconomic background, religion, race or sex."

During the last decade questions have been raised about the future of accessibility to the postsecondary system. These have resulted from

the unbridled expansion of postsecondary education in the early 1960s which characterized most provinces in Canada.

All students possessing the capacity and the motivation were to be encouraged to develop their talents at the postsecondary level. Questions concerning the value of such massive investment in higher education began, however to be raised in the mid to late '60s. Unlimited expansion (based on student demand) became increasingly restricted in the '70s when capital grants became severely limited and open-ended systems of funding were significantly altered (in Ontario global sums are first established and the value of Basic Income Units (BIUs) derived from it; BIUs are based on the level and type of university student).

These changes signified that universities, faced with increased enrolments, needed to place restrictions on the number of registrants by raising admissions standards in various programs. Thus, York University raised its cut-off average for high school applicants to the arts and science program from 60 to 70% in Summer, 1984. At the University of Toronto, would-be engineering students needed an 86% average to be considered for acceptance.

Other universities (e.g. Simon Fraser, McGill) turned to enrolment quotas to control the number of incoming students. While some forecasters predict declines in university enrolments, based on a decrease in the size of the 18-24 age group, others claim that the increased demand for a university education will negate such pessimistic predictions.

With these volatile and changing conditions in mind the Hon. Bette Stephenson, Ontario Minister of Colleges and Universities announced in the Ontario legislature on December 15, 1983, the appointment of a three-person commission (commonly known as the Bovey Commission) to review the future role of Ontario's universities. Part of its terms of reference was "to address the issue of accessibility to university level education in the context of economic realities and the context of a differentiated university structure...."

The Bovey Commission has met with a wide range of reactions by different higher education groups. These reactions will be reviewed in our treatment of Ontario within Section three.

Several years ago the Planning Secretariat of Alberta's Advanced Education Department set up a committee to analyze the composition of the Alberta postsecondary population over a 10-year period, the purpose being to draw some conclusions about the degree of access enjoyed by certain groups. The committee had this to say in a recent report (Participation Patterns Study, 1984:125-126):

It is apparent that the accessibility debate by scholars and policy makers will continue to be significant, contentious and engaging. The debate is likely to continue to focus on considerations of equity and equality. The orientation, however, may also reflect a stronger emphasis on efficiency and more precise diagnosis of socioeconomic accessibility. The accessibility debate, as it has been applied to education, may also include concerted efforts in facilitating the integral links with employers and other social institutions. The argument for a commitment to accessibility still stands, it has helped serve the needs of citizens in the past and will continue to do so in the future. It is important that we do not allow current stress to erode the philosophical basis of a policy which benefits Albertans qualified and motivated to participate in postsecondary education.

While arguing positively in favor of accessibility, the Alberta Advanced Education Committee does question or challenge the continued viability of accessibility policies. "One facet of accessibility policy involves promoting participation among groups who may have experienced disadvantaged secondary schooling by attempting to ease their admission into postsecondary institutions. It has been suggested that this may downgrade the quality of education offered" (p. 20). Furthermore, "the market value or economic relevance of postsecondary education is presently being re-examined. The orientation of the current economic situation has cast some doubt on the forecasted needs for a highly specialized labor force. This, in turn, has implications for the policy of accessibility, with some questioning the economic value of participating in postsecondary education.... All of these arguments seem to suggest that accessibility, as a policy and ideal, may be at a critical juncture and may require some rethinking in the decade ahead" (pp. 21-22).

Postsecondary Student Perspectives on Accessibility to Higher Education

The Canadian Federation of Students-Ontario Federation of Students, a key postsecondary student organization, also adopts a stratification approach in their various submissions and media presentations. Below we reprint an excerpt submitted to the Royal Commission on the Economic Union and Development Prospects for Canada, November 1983 (Donald and the Argonauts in Search of the Golden Fleece, pp. 89-93).

Our position on the need for a quality, accessible, and planned education system has not changed. If anything, it has become more emphatic: we find ourselves repeating these concerns today as it is becoming clear that our proposals are falling on deaf ears.

A society which aspires to overcome social and economic inequality must provide educational opportunities which break social barriers and bypass economic disadvantages. A society which wants a higher education capable of meeting any of its needs requires a quality postsecondary education. The basic desire for excellence in all fields of human endeavor and study can only be realized by a quality postsecondary education. Education is therefore an essential service; throughout its history, it has been held that for all citizens to have an equal opportunity to participate in postsecondary education, there should be no discrimination, especially for economic reasons. This applies to visa students as well.

In our view, the federal government has placed too much emphasis on the "hump" or "valley" of the 18 to 24 population, and too little on the factors affecting participation rates ... we suggest that this attitude takes too pessimistic a view of the future demand for knowledge in Canadian society. Implicit in the weighting of the arguments for and against increasing participation rates is the notion that the thirst for knowledge may begin to dry up. There is nothing to indicate that this will be the case: on the contrary, the experience of human history runs counter to this suggestion. More pertinent to the immediate future is the fact that both the rapid changes in science and technology that are typical of modern industrial society and the ever-increasing exposure of each of us to the complexities of life in the 20th century point with certainty to an acceleration of the demand for, and need for, ongoing education for as broad a cross-section of Ontario and Canadian society as possible.

This Royal Commission should not underestimate the adverse effects that will be the consequence of limiting enrolment and access. The increasing trend to return to or stay longer in school represents a sensible response by Canada's youth and citizenry, since the statistical evidence still suggests that higher education provides improved incomes and better jobs, even in poor economic

times. Moreover, a postsecondary education provides the recipient with greater job stability....

There is wide agreement among economists on the importance of education for economic growth. A more highly educated labor force is thought to be more productive and better able to initiate and adapt to technical progress. Scientists, engineers, and other professionals are crucial to modern industry in an era of complex and rapidly changing techniques of production. An educated work force is a crucial input in many branches of modern industry and commerce; if the supply of this input is deficient in a region, mobile business firms will invest elsewhere....

Finally, the external benefits of university education and research, reflected in more rapid advances in new knowledge and technical change, are neglected in ordinary quantitative measures of the benefits of education. Our current inability to measure these external benefits, however, is no excuse for assuming that they are unimportant. In a federal country like Canada, these external benefits can create a strong case for federal funding of higher education, particularly if graduates are mobile among regions.

Persons are being called upon in the 1980s not only to be educated, but to be re-educated several times over during their life time. Access is the lifeline to adapting successfully to new challenges.

Comparative and International Perspectives on Accessibility to Higher Education

Though many of the educational problems found in Canada may appear unique, a comparison with other nations may demonstrate that these problems are commonly experienced by the international community.

While higher education expanded between 1960 and 1970 in almost all industrialized countries, growth rates decreased sharply in subsequent years. OECD (1981:3) provides this description:

In most of the countries examined, the high increase observed between 1965 and 1970 in total university enrolments or, when figures permit, in the number of those studying for a first degree - at an annual rate of more than 7.5% in most countries and never less than 2.5% - slowed down quite sharply during the following five-year period, since only four countries (Germany, Denmark, Spain and Yugoslavia) had an annual growth of 7.5% or more and this rate was between 0.1 and 1.5% in four others (France, the Netherlands, the United Kingdom for part-time students and Sweden). The year-to-year increase since 1975 shows that, exceptions aside, the slowdown of the expansion is continuing and the growth rate has even become negative in certain countries (e.g. Canada, Denmark).

Throughout the past two decades many countries have made provisions for improving equality of educational opportunity. This is particularly reflected in increases in the amount of formal schooling at the secondary level. According to statistics in the late 1970s, this trend is still being maintained in Canada and the United States. On the other hand, participation rates for those beyond the age of compulsory schooling has declined by as much as 25% in France, Sweden, and the United Kingdom (OECD, op. cit., 1981:76).

Martin Trow, a major figure in the analysis of accessibility to higher education at the international level, had in the 1960s predicted that many European societies would follow the U.S. model and experience university participation rates of 30, 40 or 50%. He was, however, forced to admit that his 'phases of development' model simply did not take into account all relevant factors, as they apply to European societies (Trow, 1981). Thus, the steady growth in the proportions of school-leavers, qualified for entry to higher education did not (as predicted) occur. Moreover, the transfer rates to higher education of those who are qualified have not grown as expected. Indeed, many countries have shown a decline. Trow subsequently explains this lack of movement towards universal access in terms of: strong class-linked attitudes of Europeans toward upper secondary schools. If to enter that world was a mark of high academic ability, or more often, of high social class origins, then ordinary people in European countries on the whole have not thought attending university was appropriate for themselves or their children, despite what their progressive governments may have wished (Trow, 1981:95). In contrast, class-linked attitudes toward education in the United States are much weaker and education is viewed as an avenue for social mobility by working class and ethnic minority group members. As indicated earlier, Canada falls somewhere in the middle between the elite-sponsored mobility pattern evident in Great Britain and the wide-open contest mobility pattern found in the United States.

While worldwide economic stagflation and an oversupply of post-secondary graduates may lead to a decrease in demand, Geiger spells out a process called "the penalty effect" which indicates the complexity of the process (Trow, 1981:97):

The surfeit of college graduates on the labor markets in the 1970s, in the U.S. and elsewhere, has produced the phenomenon of credential inflation.... Few of the frustrated graduates spend an inordinate period of time in unemployment lines. Rather, they eventually accept less prestigious positions than they had originally hoped for, often ones that had not been considered graduate positions at all. In doing so they effectively displace workers with less education. Thus, the positions in question over time become upgraded to graduate status, and graduates correspondingly become "occupationally downgraded" as they lower their original expectations. As this occurs it might seem graduate status would become less and less enticing, but in fact it is the obverse effect that has the most significant impact. As more workers acquire graduate credentials those with less education are effectively penalized by being pushed farther down the occupational hierarchy. So, at the same time that the pull of superior graduate earnings is weakening, this very penalty effect provides an increasingly powerful push toward college for potential students.

While academically able students attempt to increase their competitive edge by gaining more educational credentials, socially and academically marginal students respond to the uncertainty of the marketplace by discounting the value of an eventual degree (e.g. attending inexpensive colleges, mixing study and work, irregular attendance). Little or no research has been conducted to explore the existence and consequences of the penalty effect in Canada.

The following quote serves to illustrate that, from the perspective of who attends university and college, Canada's postsecondary system reflects socioeconomic trends generally observed in OECD nations. Furthermore, it suggests the need to evaluate access trends - are universities becoming more or less elite? Are colleges becoming more or less democratic in their selection of students (OECD, 1983:68)?

First, it is not possible to generalize about students of low SES in higher education in the way that one can about women. This is partly because the category is itself less well defined; partly because the available figures are patchy; and partially because such evidence as there is, is ambiguous. In addition, the variables of type of institution and mode of attendance become important. Farrant analyzing trends in the United Kingdom notes that the social composition of university intake has hardly changed in 25 years, and that recent figures suggest increased proportions from the professional classes. Other figures on the social origins of university students also show no marked changes in distribution between the mid-1960s and mid-1970s. However, there is evidence in some countries of increased working-class participation in the "less noble" institutions or faculties in higher education (non-university

institutions, community colleges, colleges of advanced education, open faculties, etc.) and especially among part-time students. It may be that working-class participation in higher education as a whole is increasing, but in the mass, not elite, sectors and institutions.

While the 1983 OECD report on higher education documents that substantial numbers of "new groups" (women, ethnic minorities, students of low SES, part-timers, mature students) are now entering higher education, it does raise questions concerning the actual benefits accruing to these groups (OECD, 1983:185):

If some new groups are concentrated in the less prestigious parts of the expanded higher education system, has their relative position changed at all? In other words, is the transition from one elite to mass system merely a transition from an externally maintained stratification to an internally maintained one? Where previously the crucial distinction was between those who received higher education and those who did not, are the key distinctions now ones between different sectors, institutions or faculties? If they are, how much sense does it make to continue to speak of higher education as a whole?

Be that as it may, the OECD report suggests that the actual ranking of postsecondary institutions is in the process of changing, with greater prestige accorded to institutions by their perceived job relevance. The traditional university model has assumedly lost some of its attraction and prestige and hierarchical difference within the university (by field or study) have increased (with the more job-relevant field receiving higher prestige). Finally, the more traditional university programs (i.e. Humanities, Social Sciences, Pure Sciences) are now perceived as high risk areas and attract marginal, poorly motivated students who are simply "biding time" for lack of job opportunities (OECD, 1983:83-84). These observations, interesting as they are, have not been researched well in Canada.

Many OECD member nations are currently facing the problem of excess demand in certain parts of the postsecondary system and insufficient demand in others. Confronted with a series of common problems, these countries are rigorously questioning laissez-faire policies that lead to a passive adjustment to individual demand. These problems include: (1) the expansion from less than 10% to over 20% of the relevant age group in the number of qualified school leavers. This has raised the

political question of whether freedom of access and choice should be guaranteed to a population that has been the main beneficiary of expanded opportunities at the secondary level; (2) educational expansion has not achieved a primary objective, that is, boosting access to higher education for working class children; (3) graduate unemployment and underemployment raise doubts about basing growth in higher education on individual demand; (4) there have been conspicuous increases, in the costs of higher education as a proportion of educational expenditures (OECD, 1983:120).

3 ACCESSIBILITY IN CANADA: THE NATIONAL SCENE

For the past 30 years social scientists in many countries have studied inequalities in educational opportunities. While early studies (1940s and 1950s) adopted a case study approach and concentrated on a qualitative analysis of parentally derived, social-status-based cliques, the 1960s witnessed a move toward empirical and quantitative studies of educational inequalities in opportunity. As we indicated earlier, education in the 1960s (particularly higher education) was viewed as a key to increased economic productivity and a means of removing traditional barriers to equality in condition. James Coleman, in 1966, published a major national study of more than 4,000 schools and 600,000 pupils; this study demonstrated that many students could not compete fairly with each other because the required skills are partly determined by unequal family experiences and background. William Sewell further demonstrated that educational attainment is the key factor in the occupational or status attainment process. Aided by computer technology, Sewell (and others) made use of complex regression techniques to causally plot the influence of many social and academic factors on occupational success (Sewell, 1971). In England, a survey by the Plowden Commission on 11-year-olds aimed at identifying relative influences of school and home on school attainments (HMSO, 1967). Husen demonstrates in an important review that many European societies were also strongly interested in the relationship of social influences in educational attainment and the link between the latter and occupational success (1975).

The theme of equality of education opportunity has received far more attention by American than by Canadian writers. However, a number of committees that have studied provincial educational systems have placed a strong emphasis on achieving and maintaining equality of educational opportunity; these include the Parent Report for Quebec in 1966, the Living and Learning report for Ontario in 1968 and the Warren Commission report for Newfoundland in 1967. During and subsequent to this period, a number of research reports and government publications have investigated equality of educative opportunity and access; it will be our objective in this section to review such works.

The complexity inherent in any analysis of equality of educational opportunity and access to higher education is exacerbated by Canada's unique governmental structure. Edward Sheffield (1981: 189) explains why this is so:

It is a nation created by compromise and held together, tenuously, by further compromises. As a federation it is subject to interregional tensions and centrifugal tendencies. Each of the 10 provinces has constitutional responsibility for education - a responsibility it chooses to exercise itself, with minimal regard for the interests of the whole nation. Little wonder, then, that Canada has systems rather than a system of higher education; little wonder that national goals for higher education have not been articulated....

Any attempt to generalize about higher education in Canada must begin with a disclaimer. There will be at least one exception to almost every statement that can be made. As is evident, it is difficult even to generalize about the four eastern or the four Western Provinces, let alone the 10.

It should be noted that each province has its own pattern of postsecondary institutions, producing incredible diversity across Canada. If we categorize provinces in terms of the relationship between their universities and colleges, three major divisions become evident: (1) colleges at the pre-university level (i.e. Quebec) wherein those admitted to university usually complete two years of Cégep in the academic stream; (2) community colleges that serve a dual function of training some students for immediate employment and preparing others for upper years of university (i.e. British Columbia and Alberta); (3) colleges that are entirely distinct from universities with few students transferring to university (all remaining provinces) (Leslie, 1980:65-71).

The relationship within any province of universities and colleges may have a bearing on university participation rates (Vanderkamp, 1984:16). In recent years those provinces with well developed college systems show lower university participation rates, though Ontario is an exception.

We have several objectives in writing this chapter. First, it is important to establish provincial similarities and differences with respect to the structure of education. It is especially important to keep provincial differences in mind when comparing postsecondary

participation rates. Second, we present a summary of those national studies that relate to accessibility. Finally, we deal with two additional Canadian issues: foreign (visa) students and the impact of high technology on student access.

Canadian Postsecondary Education: A Brief Portrait Educational Structures and Organization

The structure of education across the provinces in Canada varies significantly. First, students graduating from high school take a differing number of years to essentially obtain a similar objective, that is, students from Ontario and Quebec are required to complete 13 years of schooling before being considered eligible for university entrance while students in Newfoundland were, until 1983, required to complete only 11 years of schooling; students from all other provinces (including Newfoundland) are required to complete 12. Second, provinces vary significantly in their organizational structures, prior to university. For example, a student from Alberta begins junior secondary in Grade 7; in Ontario that same student would be classified as being in secondary school. The provinces of Alberta, New Brunswick, Nova Scotia and Prince Edward Island show some uniformity in structure while the remaining provinces possess unique organizational structures. Quebec, for example, begins secondary school in Grade 7 and ends in Grade 11; the twelfth and thirteenth years of schooling are taken in Cégeps. Third, in six provinces a Bachelor of Arts degree can be obtained in three years, while in the four remaining provinces, four years are required.

Making Comparisons

These caveats concerning provincial variations in educational structure and organization should illustrate some of the complexities involved in making interprovincial comparisons of enrolments and participation rates. Both the length of undergraduate university programs and the nature of the provincial college system influence provincial participation rates. Thus, in Quebec all students proceeding to university must complete two years in a Cégep; this inflates college enrolment statistics and deflates university enrolment in that province. Table 3.1

shows the full-time student participation rates by one group, sex and province.

Table 3.2 illustrates the effect of another educational factor when comparing provinces, that is, differences in retention rates. As might be expected, the school retention rate (persons enrolled in Grade 12 as a proportion of those enrolled in Grade 2, 10 years earlier) has been increasing. While more than seven in 10 remained in school in 1973-74, more than eight in 10 remained in school in 1982-83. Provincial retention rates, however, vary substantially. For example, in Quebec the rate, in 1982-83, was 92.2% while in Nova Scotia the rate reached only 62.9%. These variations have obvious and significant implications in any discussion of accessibility. Whether variations reflect varying expectations of the school system, the availability of postsecondary institutions and employment opportunities or variations in industrial development among the provinces must still be assessed.

General Statistics

Canada has 65 public degree-granting universities, 12 of which are federated with another university. In 1982-83 there were 426,389 full-time and 266,380 part-time students enrolled in university. At the community college level, 295,586 full-time students were registered in 1982-83, an increase of 8% over the previous year. Saskatchewan was the only province where enrolment dropped (3%) (Statistics Canada, 1984:29). Full-time graduate enrolments numbered 50,173 and part-time enrolments numbered 33,329 in 1982-83 (Table 3.3). Growth of postsecondary education was rapid in the early 1970s when the annual rate of increase was 4.5%; it slowed considerably in the latter part of the decade but has increased again in the 1980s. In 1982-83 the annual rate of increase was 7% (Statistics Canada, 1984:27).

Community Colleges

The original mandate of the colleges was to provide a second chance to adult learners and to provide trained manpower for the local community. Growth in community colleges took place largely between 1960 and

1970 (Mackerracher, 1984:25-26), though college attendance rates vary widely from province to province, reflecting both the relative importance of postsecondary education in each province as well as the various educational systems and general availability of different types of postsecondary institutions (Minister of State, Youth, 1984:87). The proportion of total postsecondary enrolment represented by community college students grew from 37% in 1972-73 to 41% in 1982-83 (Statistics Canada, 1984:27).

Although a significant proportion of full-time college students in 1981 were 25 years or older (12.7%), the vast majority were younger (Table 3.4). In every province except P.E.I., the greatest concentration of full-time students was in the 17-19 age group. Among part-time students a greater proportion was in the older age groups.

Community colleges play a particularly strong role in the fields of commerce, where in 1982-83 more than a third of full-time students were enrolled in a commerce area of vocational training. Medical sciences, social services, engineering and arts accounted for another 48% of full-time enrolments (Table 3.5).

In 1982-83 men were concentrated in business, engineering and technologies. For women, the most common fields of study were business, medical sciences and social services. Medical sciences, although still quite popular, have shown a decline in total female enrolment from 29 to 25% in the last five years (Statistics Canada, 1984:29).

Universities

Canada's earliest universities had strong religious affiliations and were generally modelled on European institutions; at the time of Confederation, 13 out of a total of 17 degree-granting institutions were church related and controlled. Many of the eastern denominational universities were pressured into co-operation with the public sector until provincial charters turned them into secular institutions. These church universities adopted a federative approach as a strategy for reconciling religiosity and secularism, diversity and economic pragmatism. They tended to remain committed to the humanities, to pure research in the sciences, and to professional education.

The Western Provinces adopted a policy of controlled university development from the beginning. For example, St. Boniface (Roman Catholic), St. John's (Anglican) and Manitoba College (Presbyterian) combined to form the University of Manitoba in 1877. In each of the other three Western Provinces a single, public provincial university was created (i.e. University of Alberta in 1906, University of Saskatchewan in 1907 and University of British Columbia in 1908). Their model for development was the land-grant colleges in the United States with its emphasis on extension work and applied research.

While both the federal and provincial governments provide financial support, university policy is influenced by provincial governments, particularly since 1966, when the federal program of direct grants to universities, begun in 1951, was replaced by a shared-cost contribution to the provincial governments (Anisef and Lennards, forthcoming 1985). Other changes have reduced the direct financial role of the federal government even more and increased the discretionary power of provincial governments in allocating federal financial support.

The most notable trend in university attendance has been the increase in female full-time enrolment in the period 1960-80. Full-time enrolment of females has almost doubled at the undergraduate level and more than doubled at the graduate level; this increase at both the undergraduate and graduate levels occurred in all provinces (Table 3.6).

In 1982-83, there were 206 male students per 1,000 men aged 18-21, compared with 217 a decade before. The corresponding figures for women were 187 students per 1,000 women aged 18-21 in 1982-83 and 138 per 1,000 in 1972-73; this constituted an 8% increase over the decade, to 47% (Statistics Canada, 1984:29-30).

Whereas in 1960, female enrolment rates varied widely across the provinces, in 1980 they were all relatively comparable at both the undergraduate and graduate levels. Provincial rates for undergraduates ranged from a low of 45.2% for Quebec to a high of 48.9% for Newfoundland. At the graduate level, the range extended from 31.3% in New Brunswick to 37.4% in Quebec (Table 3.6).

Part-time enrolment also increased from 1972-73 to 1981-82 (Table 3.7). In 1972-73 approximately 31.2% of undergraduates and 35.3%

of graduates were enrolled part-time. By 1981-82 part-time enrolment increased to 38.2% for undergraduates and 40.7% for graduates. It should be remembered, however, that approximately 88% of undergraduate and graduates under 25 are enrolled full-time. In fact, the median age of full-time university students was 21 and the median age of part-time students was 30 in 1981-82 (Table 3.8).

Most of the 266,380 part-time students (Table 3.3) studying in universities in 1982-83 were undergraduates (87%); the majority of them were enrolled in arts, education and business. Women predominated at the part-time level, accounting for 61% of the total enrolment in 1982-83 (Statistics Canada, 1984:31).

Part-time enrolment does vary considerably from province to province. While fully 51.5% of undergraduate studies in Quebec occur on a part-time basis only 25.9% of undergraduate studies in Alberta are part-time. In fact, part-time study as a proportion of total enrolment at the undergraduate level declined in Newfoundland and New Brunswick from 1972-73 to 1981-82 (Table 3.7).

Full-time students view the social sciences as the single most popular discipline (Table 3.9), at undergraduate and graduate levels (accounting for over 30% at both levels of study). It should be noted that there has been a decreasing concentration of undergraduates in education and humanities, coupled with an increasing proportion in engineering and the applied sciences as well as the social sciences in the period 1970-71 to 1980-81 (Ministry of State, Youth, 1984:89).

Although women are still concentrated in the traditional arts and education fields, they are slowly making inroads into male-dominated fields such as business, engineering, dentistry, medicine, law and veterinary medicine. From 1972-73 to 1982-83 the proportion of women in veterinary medicine rose from 18 to 51%; in business from 16% to 40% and in law from 18 to 42% (Statistics Canada 1984:30).

Graduate student enrolment has grown steadily through the '70s and '80s; in 1982-83 there were 50,173 full-time (Table 3.3) and 42% part-time enrolments. The largest number of full-time graduate students (30%) were in the social sciences, with the health professions (19%) and the humanities (14%) ranking second and third. Nearly two-thirds of part-

time graduate students chose to study social sciences or education (Statistics Canada, 1984:30-32; also Table 3.9).

Visa students constitute approximately 7% of full-time university enrolments in Canada with more than half studying in Ontario and a further 20% studying in Quebec (Table 3.10). Approximately two-thirds of all visa students are concentrated at the undergraduate level of study. In recent years, a number of contentious issues have been posed with regard to the appropriateness of foreign students studying in Canada. A discussion of these issues is located at the end of Chapter 3.

National Studies

In The Vertical Mosaic, now a landmark work in Canadian sociology, John Porter analyzed the power and stratification systems of Canadian society (1965). He argued that in industrial societies school attainment becomes an increasingly important resource for both the individual and society. The forces of industrialization result in demand for technically qualified manpower, and pressure is developed to transform the educational system. Democratic ideals require that an individual's occupational choice be based on abilities and interests; in fact, the Canadian class structure militates against equality of educational opportunities for individuals possessing certain social qualities.

Porter assembled a vast array of empirical data from different sources in analyzing class and power in Canada. One part of this total effort was a Dominion Bureau of Statistics (DBS) survey analysis of the social-class origin of some 8,000 Canadian university students, who were attending universities in 1956-57.

Porter classified the occupations of the university students' fathers, using the Blighen socio-economic index. This was a scale in which occupations were classified on the basis of the average annual income and average years of schooling of members of the occupation. Porter divided it into seven classes. Thus, class 1 included the higher professions; classes 2 and 3 consisted primarily of white-collar and some higher blue-collar occupations; class 4 contained some high-level blue-collar jobs and lower-level white-collar jobs; class 5 was the category of skilled trades; and classes 6 and 7 consisted mainly of semi-skilled

and unskilled occupations. Porter also included a later survey of 11,858 Canadian university students conducted, as well, by DBS in 1961-62.

Data analysis revealed that about one-half of those university students surveyed in 1956-57 reported parental incomes of less than \$5,000 while, in 1956, 70% of all Canadian families had incomes lower than this figure.

Through the use of Blishen's socio-economic index, Porter found that children with fathers in class 1 constituted 11% of the total sample of university students (1956-57) in contrast to only 1.4% of all Canadian children (with the male head in the work force).

At the lower end of the socio-economic index, children whose fathers were in classes 6 and 7 constituted 11.1% of the university sample, but no less than 31% of all fathers were engaged in class 6 and 7 occupations in Canada.

Women students, on the average, came from higher income groups than did men. This indicated that a family's decision as to who should go to university was partly based on gender related reasoning.

The 1961-62 DBS survey essentially confirmed the results of the 1956-57 study.

In 1965 the Canadian Union of Students conducted a detailed survey of income and expenditures of Canadian university and college undergraduate students; the subsequent report was written by Robert Rabinovitch.

Data was collected for 1,887 students in Ontario; the grand total for all of Canada (excluding three universities in Quebec) was 7,611, yielding a 74.4% response rate for the sample. The objective of this study was to collect social and economic background information on students currently studying at Canadian universities and colleges.

Socio-economic status (SES) was measured by using father's and mother's occupation, parents' income, and parents' education. However, these separate measures were not combined into a composite scale

comparable to the Blishen socio-economic index used by Porter in analyzing the 1956-57 DBS survey of Canadian university students.

Analysis revealed that 19% of students came from families with incomes in the \$3,000-\$4,999 range, while over 32% of the Canadian family population fell within this range. Furthermore, fully 48% of the students' fathers were classified as either in professional, managerial, or proprietary positions in contrast with 23.3% of the Canadian population who were comparably employed. At the other end of the occupational spectrum, 64.1% of employed Canadians, but only 35% of Canadian postsecondary students, came from families where the fathers were classified as holding "blue collar" or "working class" jobs.

National figures demonstrated that only 5% of Canadian male household heads graduated from university, while this survey indicated that fully 25% of the student population had fathers who held university degrees.

Gender was not directly discussed in relation to accessibility to higher education; however, a breakdown of the student sample revealed that the male/female ratio in all provinces was shown to be approximately two to one.

An examination of the urban-rural factor showed there was a similarity between the percentage of Canadians residing on farms according to the 1961 census and the percentage of the Canadian university population whose home residence was a farm (approximately 11.4% in both cases). In Ontario, however, only 7% of undergraduate students claimed they lived on a farm.

Small population centers were grossly under-represented among postsecondary student population. For example, while 19% of the Canadian population resided in population centres of less than 1,000 persons, only 3% of the Ontario postsecondary student population lived in similar, sparsely populated areas.

Robert M. Pike's 1970 Who Doesn't Get to University and Why? was the first study to bring together much of the available sociological research pertaining to access and the first to review the national student aid effort and to assess its effects. In addition to presenting a concise and useful synthesis of research findings relating to social class,

gender, region the influence of ascriptive (e.g. social class, region, ethnicity, gender) and non-ascriptive factors (e.g. school performance, self-concept) on educational participation rates, Pike concludes with a statement that strikes a sympathetic and prophetic chord today (p. 125):

Canada is offering a university education to more and more of her young people. Many of these young people hold great expectations as to the kind of education that the universities will offer, but many subsequently see their expectations dashed in the face of large classes, overworked professors and the impersonality of the giant campus. Perhaps in the process of adjusting to the challenge of mass higher education, the universities can no longer be expected to provide the intellectual stimulation, the academic challenge, and the to and fro of classroom discussion, which has traditionally been associated with the education of a relatively small intellectual elite. I hope that this is not the case. I hope that if confronted in 10 years' time with the question "access to what?", we will still be able to reply "access to a stimulating and challenging environment for learning!" Nevertheless, as noted in the very first chapter of this report, we are beholden to define, and if necessary, to redefine, the role which is to be played by the Canadian universities during a period of rapid social change. Without such definitions, I fear that the universities may face a 'crisis of confidence' in the years ahead.

In a national study, conducted in 1965, of 145,817 Canadian secondary school students and 7,884 teachers in 373 schools, Breton (1980) analyzed the impact of psychological and sociological factors on career expectations and plans. Included were schools in each of the 10 provinces, small and large, rural and urban, and schools of different types (e.g. academic, technical, commercial, etc.). The major premise underlying this study was that an adolescent's career development or career intentions and decisions depended on a set of interrelated factors: social origin, present experience, attitudes (expectations, sense of efficacy), and preparedness (information, competence) with respect to dealing with the future.

Questionnaires were filled out by all students in secondary schools in the sample. Questions covered a range of areas including: school and program of study, educational plans, access to counselling, ideas and attitudes to work and the future, and background information on the respondent and his/her family. A mental ability test accompanied the questionnaire; principals and teachers were responsible for the administration of both. All teachers and guidance counsellors were asked to

complete a separate questionnaire. A second series of briefer questionnaires was also completed by students and principals in the spring of 1966.

Socio-economic origin in this study was measured by the occupational status of the father. The 1961 DBS Occupational Classification Manual was employed to classify respondents' answers. The high SES category included managerial, professional and technical, clerical, and sales occupations; the middle SES category included craftsmen, foremen, and operatives; the low SES category included service workers, laborers, and farm workers. It should be noted that including clerical and sales occupations in the high SES category makes this a relatively weak measure of socio-economic background.

The size of community (i.e. urban-rural location) was determined on the basis of the 1961 census. In the case of urban communities, the coding was done using metropolitan area rather than municipality data.

Students in "all-French schools" were classified as French speaking while students in "all-English schools" were classified as English speaking. This classification was initially derived from the principal's request for either an English or a French questionnaire.

Though Breton's study concentrated on vocational decision making among secondary school students, the results are clearly relevant to postsecondary accessibility since, in many cases, occupational plans entail educational plans and ambitions.

Breton found that the higher the father's occupational status, the lower was the likelihood of vocational indecision. However, the relationship was weak, as indicated by the fact that a person's SES had less importance for the vocational decision making than occupational expectations. After some examination, Breton concluded that the educational background of parents was unrelated to vocational indecision. The data analysis revealed that SES charted a substantial influence on postsecondary expectations. Thus, 14% more high SES students compared with low SES students planned on completing secondary school and 12% more of this high SES group planned to pursue a postsecondary education. The effect of completing secondary school was slightly weaker for girls than for boys. Eighty-five percent of boys and 87% of girls who lived in

large urban areas, while 69% of boys and 75% of girls living in rural areas, planned on finishing high school. At comparable levels of mental ability, boys from urban areas were more likely to plan to finish high school and attend postsecondary institutions than boys from rural areas. For girls of high mental ability, there was virtually no relation between community size and plans for further education. Approximately the same proportion of francophone and anglophone boys were definite about finishing high school. The situation differed for girls with 83% of anglophone girls and only 74% of francophone girls planning on finishing high school. Francophone students (both boys and girls) displayed higher postsecondary aspirations than their anglophone counterparts. These differences were especially evident in the lower-SES and lower-mental-ability groups. It should be noted that this finding tends to reverse most studies in the field and may reflect 'fantasy aspirations' on the part of francophone students. Finally, francophone students were more likely to be without a career goal than their anglophone counterparts. This relationship held even when SES and mental ability were statistically controlled.

✓The most extensive national study on postsecondary students in Canada was conducted by Statistics Canada at the request of the Department of the Secretary of State in early 1975. The study consisted of a sample survey of about 100,000 university and college students and resulted in approximately 60,000 usable replies (Ahamed et al., 1976). Comprehensive data on the demographic, educational, socio-economic background, expenditures and incomes, and employment of postsecondary students were provided by the survey, the purpose of the study being to relate provincial variations in postsecondary participation rates to student characteristics. These data were sought to answer a number of questions on participation in postsecondary education. For example, what proportion of postsecondary students were from low-income families? How important were loans as a source of students' income? What are some of the factors which accounted for differences in students' incomes and expenditures? Did students take their postsecondary education in their home provinces? Did students from different parts of the country participate to the same extent in postsecondary education? How did part-time

students differ from full-time students? How important were differences in incomes and expenditures in explaining the choice of part- or full-time study? What were the main differences between students in universities and colleges?

At the time the survey was conducted (February 1975), the population covered included all students enrolled in postsecondary institutions in Canada. These institutions were operationally defined as consisting of all degree-granting universities and community colleges (including Cégeps in Quebec, Colleges of Applied Arts and Technology in Ontario, Schools of Art, agricultural colleges, teacher colleges, regional and hospital schools of nursing and other similar institutions). Many types of students were covered, including: full- and part-time students, transfer students, terminal students (those enrolled in a career or vocationally oriented program in community colleges), professional students (those in law, medicine and dentistry), undergraduate and graduate university students.

The size of the sample was based on a coefficient of variation of 10% and allocated among institutions in proportion to the number of students in a particular field of study. The total sample consisted of 66,880 university students and 35,925 community college students. The response rate was 60%.

Ahamad reported that postsecondary participation rates increased significantly since 1960, from under 10% in 1960 to almost 19% in 1973. These rates varied by province. For example, apart from the Yukon and the N.W.T., the Atlantic Provinces showed the lowest participation rates, while Quebec and Ontario had the highest. Part-time students formed 19% of the total enrolments in postsecondary institutions and 60% of the students enrolled in postsecondary institutions were under the age of 22. Financial considerations and parental influence had a negligible influence on choice of program and university. Rather, many students indicated that personal and career interests, proximity to place of residence and the reputation of the institution were major factors influencing their choice. Almost 60% of students had never borrowed in order to finance their education and proportionately more students from the Atlantic Provinces tended to borrow than students from other

provinces. Analysis revealed that the highest proportion of students were enrolled in the social sciences programs at the university level, while at the community college level, most were registered in terminal programs. Approximately 50% of postsecondary students were female, although this varied by type of institution. At the university level, a higher percentage of males were enrolled, while a higher percentage of females were enrolled in community colleges and part-time studies. A contrast of university and college students with reference to father's education revealed that a significantly higher proportion of full-time university students (42.0% among professional students) had fathers with some university education when compared to full-time college students (12.0% of the terminal students). The majority of students were enrolled in postsecondary institutions in their home province with some variations depending on the level and registration status of enrolled students. For example, 77% of part-time graduate students were studying in their home provinces, while only 47% of full-time graduate students enrolled in postsecondary institutions in their home province. One-third of students from the Atlantic Provinces were enrolled in postsecondary institutions elsewhere, while only 10% of those from Quebec and Ontario studied elsewhere. Quebec and Ontario also had the largest proportion of out-of-province students enrolled in the postsecondary institutions.

The studies reviewed in this section offer rich material that document the social stratification effects on access to higher education. Findings across all studies reveal that lower socio-economic status has constrained, and continues to constrain, university level aspirations of young persons in Canada. Less influential but still significant are the limits placed on the development of educational aspirations and expectations by one's place of birth. The postsecondary expectations of urban youth are wider in scope than those of rural youth. Although women's current postsecondary participation is dramatically higher than in the past, a number of factors (including type of institution, program choice and vocational expectations) indicate that women today still experience inequalities in educational opportunity.

Foreign (Visa) Students

Introduction

Insofar as current economic constraints affect the enrolment, staffing, and available facilities in postsecondary institutions, the suggestion has been made that the foreign student population, about 5% full- and part-time university enrolment in Canada, restricts accessibility for Canadians. Included in their reasons are that foreign students take places away from Canadian students, and are heavily concentrated in certain areas of study, thus reducing the chances of Canadian students to take advantage of these study areas. These obviously are fundamental issues to address in any consideration of accessibility. However, given the complex and delicate nature of these issues, this discussion will basically concern itself with the role of foreign students in postsecondary education. Are Canadians being denied places in their own educational institutions to make room for foreign students? Do foreign students benefit Canada? Who are these foreign students?

In the 1982-83 academic year, there were more than 46,000 foreign students studying in Canada's postsecondary institutions, 7,503 were in post secondary non-university, 35,503 were attending universities and about 3,304 were in training in hospitals, religious institutions and other schools. Table 3.10 gives a percentage breakdown of the number of foreign university students by province over the years; and Table 3.11 gives a breakdown of areas of study.

Commenting on the population of foreign students in postsecondary institutions, the Commission on Canadian Studies, in Some Questions of Balance (Symons and Page, 1984:240-241), writes

This Commission does not think that there are too many doctoral students in Canada. On the contrary...it believes that there are immense advantages accruing to Canada from having foreign students here and that this is particularly true if the students are at the postgraduate level.... It may perhaps be that the current percentage of the total Canadian doctoral degree enrolment constituted by foreign students is a bit high. But, the Commission believes...that the answer lies not in a reduction in the number of foreign graduate students.... There is very little evidence of foreign students taking places away from potential Canadian students at Canadian universities. The problem is, rather, one of encouraging and

assisting Canadian students in a more effective manner to pursue their work at the postgraduate level, and of enabling Canadian graduate schools to expand and develop to meet the future requirements of the nation.

Who Benefits?

The Commission on Canadian Studies takes the position that "foreign students play an important role in promoting knowledge about Canada abroad. They also contribute to the knowledge and understanding that Canadians have of themselves and of the rest of the world" (p. 216). It is argued that education must be seen in international terms, and as such, foreign students can play a key role in establishing and maintaining links between Canada and the scholarly and professional communities of other countries. Lewis Perinbam, vice-president of Canadian International Development Agency (CIDA) argues that foreign students "help to internationalize our education system, they add a new dimension that books and audio-visual systems cannot achieve. Their presence provides a valuable social and intellectual experience which can be of permanent value to our young people and to our country" (Weston, 1985:40). Furthermore, John Flint notes "that universities exist, 'primarily' or rather fundamentally, to serve knowledge and those who wish to be students of knowledge. If their primary function is to serve Canadian national needs, then they are no longer universities but something else" (p. 21).

Evidence points to the fact that it is in the best interest of Canada to educate foreign students because clearly there are political, economic and, more importantly, tremendous educational benefits. "Through the contribution they can make, both inside and outside the classroom and laboratory, and through the particular knowledge and expertise they bring with them, foreign students can improve the quality of the educational experience offered by Canadian institutions" (Symons and Page, 1984:221). In fact, in a recent report prepared for the Ontario Ministry of Colleges and Universities, the Bovey Commission went beyond their mandate to point out that government should ensure that foreign visa students are adequately represented in our universities.

The commission agrees with the position that foreign students make a significant contribution to the quality of education in Ontario. Therefore a reduction in their numbers would mean a "potential loss in quality of the educational experience for Canadian students within Ontario universities if the international element in the student bodies were to continue to diminish sharply" (Ontario Universities 1984:10). In light of this, the commission went on to recommend that "arrangements be adopted to ensure that the proportion of foreign visa students does not fall below 5% of total enrolment" (Ontario Universities 1984:37). Apart from the fact that the presence of foreign students in Canada could be regarded as being "of greater importance to our own education than it is to them," supporters of the presence of foreign students in our educational system further argue that Canada has a moral obligation to educate these students (Symons and Page, 1984).

In her examination of language and accent as barriers in the participation of international students in Canada's postsecondary institutions, Russell (1983:20-21) concludes that difficulties in English help to inhibit

a student from participating in class. The fact that ESL courses exist, means the problem is recognized. The fact that there tend to be grammar courses indicates that it is not known that most students from neo-colonial societies have learned the language as a school subject. This then contributes to the persistence of the problem.

In these respects,...foreign students are disadvantaged academically in coming to Canada.

Despite the benefits that Canada derives from foreign students' participation in its postsecondary educational system, questions about costs of educating foreign students are being raised: How much does it cost? Who pays? Who receives? Who should pay for the education of foreign students? Which students? And how much? Are differential fees the answer? (Symons and Page, 1984:244). This has consequently prompted provinces such as Alberta, Ontario, Quebec, Nova Scotia, Prince Edward Island and Newfoundland to take a user-pay approach in which foreign students pay fees 50-100% higher than those for Canadians. While there is some public support for differential fees, others, like the Ontario Confederation of University Faculty Association (OCUFA, "Visa Students in Canadian Universities," July, 1982:2) argue that:

Differential formula fees for visa students are counterproductive to the aims and goals of international education for a number of reasons. (1) They impede the free flow of information and scholars across national boundaries, a flow that is both necessary and desirable for the advancement of knowledge. This impediment is particularly serious with respect to graduate training. (2) The imposition of differential fees hinders Canada's exercise of its responsibility to educate students from abroad. Canada owes a debt to other countries that have educated Canadians, and has a moral responsibility to train nationals of less affluent nations. (3) Differential fees for graduate students will seriously disrupt research in Ontario universities, in which graduate students play such a significant part, at the very time when Canada needs, and has proclaimed an intention, to spend a greater proportion of its resources on research. (4) Differential fees run counter to both Canada's and Ontario's self-interest in the world in terms of shaping the attitudes of future leaders of other nations towards both Canada and Ontario. (5) The opportunity to encounter other students with a wide range of different perspectives and life experiences is beneficial to the education of Canadian students. Differential fees will reduce that opportunity.

The Canadian Federation of Students-Ontario (CFS-O) also argues that in addition to the cultural and economic contribution that visa students make to life in Ontario, "the funds they bring into the province provide more capital than the average cost of educating them" (April, 1983:21). Therefore, (CFS-O, April 1983:22)

...we feel that it is important that the Government of Ontario fulfill its commitment to international co-operation and education. The massive tuition increase of 40% for first-year and incoming visa students is not only unfair in that it places education out of the reach of individuals from dozens of lesser developed countries, it also does not comply with the Inflation and Restraint Act imposed by the government. Who exactly does the government hope to help educate with this type of policy? A handful of rich individuals from the industrialized countries and perhaps the elite of the rest of the world. Such a practice simply makes a mockery of international education.

The Federation is also astounded by the government's claim that it is saving the taxpayers money by charging differential fees. This argument is a tenuous one to make at the best of times, but especially in light of how the differential pool system works.... If the funds held back from the BIU grant for visa students are simply pooled and redistributed to the universities on the basis of proportion of total systems' funding, then the tax payer is saving no money. In fact, the visa students end up subsidizing our decaying university system. If the government is to pursue such a hypocritical course of action, then the least that could be done is to make the differential pool an integral part of the funding mechanism and

include in the new funding formula so that universities can budget with this money (many don't, referring to it as "unexpected income").

Indeed, the substantial increase in foreign student fees have caused an estimated 5,000 decline in the number of these students studying in Canada. Professor Thomas Symons, Chairman of the Canadian Commonwealth Scholarship and Fellowship Committee, sees the decline in foreign students as a direct result of the "less fair, less balanced" treatment these students receive both from government and educational institutions (Weston, 1985:40). In recognizing the role of the federal government in this issue the Ontario Commission on the Future Development of the Universities of Ontario recommends that that "the Government of Ontario ask the Government of Canada to assume, as part of its responsibilities for external affairs and foreign aid, the differential portion of the tuition fees of the foreign visa student up to a maximum of 5% of total enrolment in Ontario universities, at an estimated cost of \$25 million annually" (Ontario Universities, 1984:44).

Who Are the Foreign Students?

Table 3.12 shows that the majority of foreign students come from relatively few countries and fully 45% come from Asia. Thus, foreign students are not representative of the international community. Moreover evidence presented by Symons and Page (1984) documents that students come overwhelmingly from more well-to-do countries.¹ Over one-half (54.2%) of the foreign postsecondary students in Canada come from 50 high-income countries, while one-tenth (10.4%) come from 40 of the poorest countries. In fact, less than 3% of the foreign university students come from 25 of the "Least Developed" countries (Symons and Page, 1984:230).

Nonetheless, the high proportion of foreign students coming to Canada from the high-income countries, and the very low proportion coming from the low-income countries, does raise the question: are we giving help to those who most need it? Or, indeed, to those who most deserve it? Unfortunately, there is little information available about the

¹Hong Kong, U.S.A. and six OPEC countries classified as high income countries; Malaysia and six OPEC countries classified as middle-income countries; and some 40 countries, including one OPEC, with GNP per capita below U.S. \$400, classified as poorest countries (Symons and Page, 1984:231).

financial circumstances and socio-economic background of foreign students in Canada (Symons and Page, 1984:230).

The majority of foreign students come from more affluent countries, and given the differential fees it seems that Canadian education is more likely to be accessible to students from affluent countries and who tend to be more wealthy. In fact, in commenting on the characteristics of foreign students, the Commission on Foreign Student Policy in Canada writes that "most come from advantaged, urban backgrounds, like their Canadian counterparts, and...for the most part (are) individuals from advantaged socio-economic backgrounds" (The Right Mix, 1981:6).

In a study of the educational experience of 76 university students from the "Third World or developing countries," Russell (1983) reports that "to an even greater degree than the students at Concordia, the students come from the wealthy in their own societies" - 66% from middle, and 28% from upper or upper middle class backgrounds. They had parents in business and professional occupations (p. 11). In essence, visa students tend to have parents who perceive a university degree as important in terms of achieving success. This explains why a large majority of these students are likely to be financially supported while they study in Canada. As a result, many students "feel under particularly strong pressure to succeed. Not only does their own future depend on it, the value of the money of their families does also" (Russell, 1983:12).

Apart from being able to afford the high cost of a Canadian education, given the social disadvantages already mentioned, why do foreign students attend universities here? Russell (1983) notes that many of the students, most of whom were undergraduates, reported "that they could not get into university at home, either because it had a restricted enrolment or did not provide a degree in what they wanted to study, or that they felt that a degree from overseas was far more broadening or prestigious" (p. 12).

When the evidence is weighed, Canada appears to gain rather than lose (economically, socially and culturally) from foreign students' participation in postsecondary education. Notwithstanding this, more research is needed to provide information concerning foreign (visa)

students. Formulating policy positions without such information can tarnish Canada's image at home and at the international level.

New Technologies and Accessibility

A relatively new and largely unresearched area pertaining to student accessibility concerns the impact of new educational technologies (e.g. computer systems and other communication technologies including videotapes, videodiscs, satellite television, home computers, etc.) on equality of educational opportunity. In the past few years the high technology industry in Canada has expanded rapidly and the new technologies in information and communication have the potential to change every aspect of education.

A review by the Canadian Commission for UNESCO of firms such as IBM, Digital, B.C. Tel and AEL Microtel revealed that

The respondents from the high technology industry unanimously expressed the view that the availability, and particularly, the location of education would change because of the new technologies. Mitel defines the extension of education to the home: "Use of computers and communications in education could be very powerful in programs that are tailored to the individual. This could also make more education at home a potential concept" (Tobin, 1984:5).

Many of the high-tech firms included in this review remarked on the beneficial contributions the new educational technology can make. A representative from Honeywell stated (Tobin, 1984:7):

In a country such as Canada, regional disparities as applied to the quality of schools and education can be greatly diminished over the years to come. A bright student living in the most remote and small corner of this country, as long as it is served by communications systems, can participate in the same quality of training as his brother can, living and attending our finest schools in our best serviced areas.

Some social scientists disagree with this positive prognosis. Robert M. Pike (1983:8-9) presents a somewhat more pessimistic picture concerning the impact of new technologies on accessibility:

In a nutshell, there is a distinct possibility that social inequalities in opportunity of access to the new technologies may, like differential access to (as well as interest in) books in past times, become a new form of educational inequality and, as such, have a

major impact upon solid selection for higher learning.... Of course, the new technologies are often held to offer new and bright horizons for educationally disadvantaged groups in society, as indeed they already are in the case of some physically and perceptually handicapped people. However, as a sociologist, I have learned to be wary of sweeping claims for the equalizing benefits of technology in the context of societies which, like Britain and Canada, show major regional and group variations in economic circumstances and in basic preparedness for learning. Usually, educational innovations which yield social advantages are exploited for the benefit of those who are already socially advantaged, rather than those who have the greatest need.

An everyday illustration of this pessimistic hypothesis involves the use of computers for teaching purposes. In practical terms, school divisions and provinces vary in terms of how much they can afford to spend on computers. In addition, the potential home access to computers favors middle-class over working-class students. The combined effects of regional and family inequalities could serve to exacerbate existing inequalities in educational opportunity.

In addition to the relatively short-run consequences of the new educational technology for student access there are the more dramatic, long-term consequences, resulting from changes in the Canadian occupational structure. A fairly broad consensus exists that specific changes in jobs await new generations of Canadians. Some agreement appears to exist on the extent of potential job destruction in very specific segments of the job market. Consequences will be particularly severe for older, less flexible workers as well as lower-level skilled workers. Unless education is effectively redesigned, new entrants to the labor force will also encounter problems in locating decent jobs.

Most research pinpoints women as particularly vulnerable to the changes brought about by the new technology. This is because women are clustered in a few job sectors (e.g. clerical, sales, services) and it is these sectors that will be most strongly altered (or eliminated) by present technological developments (Labour Canada Task Force, 1982:40). These imminent changes place heavy responsibility on schools at all levels to ensure that the benefits of the new technology will outweigh the problems created, particularly for specific social and cultural groups.

Table 3.1 Full-time post-secondary participation rates by specific age groups and sex, Newfoundland, 1970-71 to 1982-83

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	2.7	4.7	3.4	18.6	10.8	14.7	2.0	0.6	1.3	12.3	6.9	9.6	14.0	9.5	11.8
1971-72	3.2	4.4	3.8	20.5	12.6	16.6	2.1	0.7	1.4	13.4	7.9	10.7	15.4	10.6	13.0
1972-73	2.8	4.2	3.5	20.1	12.4	16.3	2.0	0.7	1.3	13.1	7.9	10.5	14.9	10.5	12.7
1973-74	3.7	4.3	3.7	16.7	10.9	13.8	1.7	0.7	1.2	10.9	7.0	8.9	12.7	9.6	11.2
1974-75	3.3	5.7	4.2	14.7	9.2	12.3	2.4	1.1	1.8	9.9	6.5	8.2	12.5	9.5	10.7
1975-76	3.4	5.4	4.4	14.7	9.9	12.8	2.1	1.0	1.5	9.7	6.9	8.3	11.7	10.2	10.9
1976-77	3.7	5.2	4.5	13.2	12.1	13.7	2.0	0.9	1.4	10.0	7.6	8.8	12.2	10.7	11.5
1977-78	3.7	5.4	4.5	15.1	12.5	13.9	2.2	0.9	1.5	10.0	7.8	8.9	12.2	11.0	11.6
1978-79	3.6	5.1	4.3	13.7	11.7	12.7	2.0	0.9	1.4	9.0	7.3	8.1	11.1	10.3	10.7
1979-80	3.8	5.2	4.5	14.7	12.7	13.7	2.1	1.0	1.5	9.5	7.9	8.7	11.8	11.0	11.4
1980-81	4.4	5.7	5.0	14.4	13.9	14.2	2.1	1.0	1.5	9.5	8.5	9.0	12.1	11.9	12.0
1981-82	4.5	6.2	5.4	16.4	15.5	16.0	2.5	1.2	1.8	10.9	9.6	10.3	13.7	13.3	13.5
1982-83	4.9	6.4	5.7	18.8	18.0	18.4	2.6	1.3	1.9	12.4	11.4	11.9	15.4	15.2	15.3

Table 3.1 (continued) Prince Edward Island

Academic year	Community college 18 to 24			Undergraduate 18 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	2.6	5.6	4.2	23.7	18.4	21.1	15.0	11.5	13.3	16.6	15.2	15.9
1971-72	4.8	9.8	7.3	24.8	19.3	22.1	14.8	11.7	13.2	17.6	17.5	17.6
1972-73	3.6	8.6	6.0	22.2	17.3	19.5	13.1	10.2	11.5	15.2	15.3	15.1
1973-74	7.3	13.4	10.2	17.7	15.8	16.8	10.7	9.5	10.1	15.1	17.8	16.2
1974-75	8.7	10.6	9.8	17.0	13.9	15.6	10.3	8.7	9.5	15.6	15.4	15.4
1975-76	6.8	8.7	7.9	17.5	14.7	16.3	10.8	9.4	10.1	15.0	14.9	15.0
1976-77	5.9	10.7	8.2	17.1	13.4	16.1	10.5	9.4	10.0	14.3	15.8	15.1
1977-78	4.7	11.6	8.1	17.2	10.0	16.4	10.4	9.9	10.1	13.2	17.1	15.0
1978-79	6.5	10.1	8.2	15.9	14.0	14.8	9.5	8.5	8.9	13.3	14.5	13.8
1979-80	6.3	10.3	8.3	14.9	13.4	14.2	8.9	8.0	8.5	12.6	14.1	13.5
1980-81	6.1	11.1	8.7	14.4	13.4	14.1	8.6	8.0	8.4	12.2	14.7	13.6
1981-82	6.8	12.1	9.2	14.1	15.2	14.3	8.7	9.3	8.9	12.9	16.6	14.5
1982-83	6.9	11.2	9.1	15.8	16.2	16.0	10.1	10.2	10.2	14.5	17.3	15.9

Table 3.1 (continued) Nova Scotia

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	3.4	6.4	4.8	29.3	19.7	24.5	4.5	1.5	3.0	19.7	12.6	16.2	21.7	16.5	19.1
1971-72	3.5	6.6	5.0	30.4	21.7	26.0	4.1	1.5	2.8	19.7	13.2	16.5	21.7	17.1	19.4
1972-73	3.0	5.4	4.2	28.8	21.5	25.2	4.2	1.5	2.9	18.9	13.4	16.2	20.7	16.5	18.6
1973-74	3.2	5.1	4.1	27.8	21.8	24.8	4.1	1.6	2.8	18.3	13.7	16.1	20.2	16.7	18.5
1974-75	3.4	5.3	4.3	27.1	22.4	24.9	4.6	1.9	3.3	18.1	14.3	16.2	10.2	17.4	18.8
1975-76	3.6	5.4	4.5	27.2	23.8	25.6	4.8	2.1	3.5	18.5	15.1	16.8	20.6	18.4	19.6
1976-77	3.9	5.3	4.5	26.2	24.0	25.2	5.1	2.2	3.7	18.0	15.3	16.7	20.4	18.5	19.4
1977-78	3.8	4.9	4.4	26.0	24.4	25.3	4.9	2.5	3.7	17.6	15.5	16.6	19.8	18.4	19.2
1978-79	3.6	4.8	4.2	25.1	24.2	24.7	4.7	2.5	3.6	16.8	15.2	16.0	18.9	18.0	18.5
1979-80	3.9	4.6	4.2	24.5	24.3	24.4	4.5	2.4	3.4	16.2	15.2	15.7	18.5	17.9	18.2
1980-81	4.0	4.8	4.4	25.3	24.6	24.9	4.6	2.5	3.6	16.8	15.5	16.1	19.2	18.3	18.7
1981-82	3.7	4.4	4.0	26.9	26.0	26.4	4.6	2.7	3.7	17.9	16.5	17.2	20.1	19.1	19.6
1982-83	3.7	4.7	4.2	28.6	27.7	28.2	5.3	2.9	4.1	19.3	17.5	18.4	21.5	20.3	20.9

Table 3.1 (continued) New Brunswick

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	2.8	8.1	5.4	24.5	15.1	19.9	3.1	0.7	1.9	16.4	9.6	13.1	18.2	14.7	16.5
1971-72	3.0	7.1	5.0	25.4	15.8	20.6	2.9	1.0	2.0	16.4	9.9	13.2	18.2	14.2	16.2
1972-73	2.7	5.1	3.9	22.8	15.2	19.1	2.6	0.8	1.7	14.8	9.5	12.2	16.4	12.6	14.5
1973-74	2.0	2.7	2.4	22.1	16.1	19.1	2.2	0.7	1.5	14.2	10.1	12.2	15.4	11.8	13.6
1974-75	1.9	2.6	2.2	21.1	16.5	18.9	2.1	0.8	1.5	13.6	10.4	12.0	14.7	11.9	13.4
1975-76	2.2	2.6	2.4	21.7	17.4	19.6	2.1	0.8	1.4	14.0	10.8	12.4	15.4	12.4	13.9
1976-77	2.3	2.9	2.6	20.7	16.9	18.8	2.0	0.8	1.4	13.4	10.4	11.9	14.8	12.2	13.5
1977-78	2.6	3.1	3.8	20.6	17.3	19.0	1.9	0.7	1.3	13.1	10.5	11.8	14.6	12.3	13.5
1978-79	2.9	3.1	3.0	20.1	17.3	18.7	1.7	0.6	1.2	12.7	10.4	11.5	14.4	12.2	13.3
1979-80	3.2	3.3	3.2	20.0	17.7	18.8	1.6	0.8	1.2	12.4	10.6	11.5	14.3	12.6	13.4
1980-81	3.3	3.6	3.5	21.2	18.0	19.6	1.8	0.8	1.3	13.2	10.8	12.0	15.1	12.9	14.0
1981-82	3.2	3.9	3.6	22.2	19.6	20.9	1.9	1.0	1.4	14.0	11.9	12.9	15.9	14.2	15.1
1982-83	3.4	4.3	3.9	23.6	21.1	22.4	2.3	1.1	1.7	15.1	13.0	14.1	17.2	15.5	16.4

Table 3.1 (continued) Quebec

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	17.6	14.5	16.1	15.8	7.9	11.9	3.4	1.2	2.3	10.8	5.1	8.0	21.3	13.7	17.5
1971-72	20.3	16.4	18.4	15.4	8.3	11.9	3.9	1.2	2.5	10.7	5.3	8.0	22.6	14.9	18.7
1972-73	23.3	19.6	21.3	15.2	8.9	12.0	4.5	1.5	3.0	10.8	5.9	8.3	14.5	17.4	21.0
1973-74	24.2	20.5	22.4	15.0	9.3	12.2	4.1	1.5	2.8	10.6	6.1	8.4	25.1	18.2	21.7
1974-75	23.4	22.3	22.8	14.8	9.5	12.2	4.4	1.7	3.1	10.6	6.3	8.5	24.5	19.5	22.0
1975-76	23.9	22.8	23.4	15.5	10.5	13.0	4.4	2.0	3.2	11.0	7.1	9.0	25.3	20.6	23.0
1976-77	23.6	23.7	23.6	15.2	10.8	13.0	4.2	2.1	3.2	10.8	7.2	9.0	24.9	21.3	23.1
1977-78	25.4	26.2	25.8	15.5	11.5	13.5	4.2	2.1	3.2	10.9	7.6	9.2	25.9	23.0	24.4
1978-79	26.3	26.4	26.3	15.5	11.9	13.7	4.3	2.3	3.3	10.9	7.9	9.4	26.5	23.4	24.9
1979-80	25.4	25.9	25.6	16.0	12.9	14.5	4.2	2.5	3.3	11.1	8.5	9.8	26.0	23.6	24.8
1980-81	25.7	26.5	26.1	16.3	13.6	15.0	4.4	2.7	3.5	11.3	9.0	10.2	26.2	24.3	25.3
1981-82	26.5	28.3	27.4	16.5	14.2	15.4	4.5	2.9	3.7	11.4	9.4	10.4	26.7	25.5	26.1
1982-83	28.0	30.7	29.3	17.1	14.9	16.1	4.7	3.1	3.9	11.9	9.8	10.9	28.0	27.3	27.6

Table 3.1 (continued) Ontario

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	10.5	9.7	10.1	25.4	14.1	19.7	6.3	1.7	4.0	17.6	9.0	13.3	23.9	14.7	19.3
1971-72	10.0	8.9	9.4	27.6	16.6	22.1	6.2	1.7	4.0	18.4	10.0	14.2	24.0	15.0	19.5
1972-73	9.9	9.2	9.5	26.6	16.5	21.6	6.3	1.9	4.1	18.1	10.3	14.2	23.7	15.6	19.7
1973-74	9.8	9.6	9.7	26.5	17.1	21.8	6.3	2.1	4.2	18.2	10.9	14.5	24.0	16.5	20.2
1974-75	9.5	9.6	9.5	26.5	18.5	22.5	5.9	2.2	4.0	18.0	11.7	14.9	23.6	17.4	20.5
1975-76	9.7	9.9	9.8	26.7	19.8	23.3	6.0	2.4	4.2	18.2	12.6	15.4	24.0	18.4	21.2
1976-77	9.3	9.6	9.5	26.0	20.7	23.4	5.9	2.5	4.2	17.9	13.1	15.5	23.4	18.8	21.1
1977-78	9.6	9.8	9.7	24.8	20.3	22.6	5.5	2.4	3.9	16.8	12.7	14.8	22.5	18.4	20.4
1978-79	9.8	10.5	10.1	23.5	19.4	21.5	5.2	2.5	3.8	15.9	12.2	14.1	21.7	18.3	20.0
1979-80	10.5	11.2	10.9	23.3	19.3	21.3	4.9	2.6	3.7	15.7	12.2	14.0	21.9	18.7	20.3
1980-81	11.3	12.0	11.7	23.6	20.1	21.9	5.1	2.8	4.0	16.0	12.8	14.4	22.7	19.8	21.2
1981-82	11.9	12.7	12.3	24.1	21.2	22.7	5.3	3.0	4.2	16.4	13.6	15.0	23.4	20.9	22.2
1982-83	13.1	13.9	13.5	24.7	22.2	23.5	5.3	3.1	4.2	16.8	14.2	15.5	24.5	22.2	23.3

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Table 3.1 (continued) Manitoba

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	4.2	5.1	4.7	26.3	16.6	21.4	5.5	1.2	3.0	17.7	10.5	14.1	20.3	13.6	17.0
1971-72	4.9	5.8	5.3	26.9	17.8	22.4	4.4	1.1	2.8	17.5	10.8	14.2	20.4	14.2	17.3
1972-73	4.2	5.0	4.6	25.4	17.5	21.5	4.3	1.1	2.7	16.8	10.8	13.9	19.3	13.8	16.6
1973-74	3.2	4.3	3.7	24.7	17.3	20.9	4.3	1.1	2.7	16.4	10.7	13.6	18.3	13.4	15.9
1974-75	3.0	4.3	3.6	24.4	17.8	21.1	4.3	1.3	2.8	16.2	11.2	13.7	18.0	13.7	15.9
1975-76	3.5	4.6	4.1	25.5	18.9	22.1	4.3	1.3	2.8	16.9	11.7	14.3	19.0	14.5	16.7
1976-77	4.0	4.8	4.4	23.9	18.6	21.3	4.3	1.6	2.9	15.9	11.6	13.7	18.2	14.4	16.3
1977-78	3.7	4.3	4.0	22.6	18.9	20.8	4.0	1.6	2.8	14.9	11.6	13.2	17.1	14.1	15.6
1978-79	3.8	4.1	4.0	21.4	17.8	19.6	3.9	1.7	2.8	14.1	11.0	12.6	16.2	13.4	14.9
1979-80	3.9	3.9	3.9	20.3	17.3	18.8	3.8	1.8	2.8	13.4	10.8	12.1	15.7	13.1	14.4
1980-81	4.3	4.6	4.5	20.1	17.4	18.8	4.8	2.3	3.5	13.7	11.1	12.4	16.3	13.8	15.0
1981-82	4.3	4.9	4.5	21.4	18.6	20.0	5.0	2.6	3.8	14.6	11.9	13.3	17.2	14.8	16.0
1982-83	4.2	5.0	4.6	24.0	20.5	22.3	5.3	2.7	4.0	16.3	13.1	14.7	18.7	16.0	17.4

Table 3.1 (continued) Saskatchewan

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	2.6	3.9	3.3	25.0	17.1	21.1	3.1	0.6	1.9	16.8	10.9	13.9	18.4	13.3	15.9
1971-72	3.2	4.4	3.8	26.1	17.4	21.9	3.3	0.5	1.9	12.5	11.0	14.3	19.5	13.7	16.6
1972-73	3.2	4.2	3.7	22.7	15.4	19.1	2.9	0.6	1.8	15.3	9.9	12.7	17.3	12.5	15.0
1973-74	3.2	4.2	3.7	22.3	15.5	19.0	2.4	0.7	1.6	15.0	10.1	12.6	17.0	12.7	14.9
1974-75	2.3	4.6	3.4	21.2	16.1	18.8	2.2	0.6	1.5	14.2	10.3	12.3	15.7	13.2	14.5
1975-76	2.2	4.6	3.4	21.8	16.8	19.3	2.4	0.7	1.6	14.4	10.7	12.6	15.8	13.6	14.7
1976-77	2.3	4.3	3.3	21.4	17.6	19.6	2.5	0.9	1.7	14.0	11.2	12.6	15.5	13.8	14.7
1977-78	2.4	4.2	3.3	20.9	17.3	19.2	2.4	0.8	1.7	13.5	10.8	12.2	14.9	13.3	14.2
1978-79	2.6	3.9	3.2	19.5	17.3	18.4	2.1	0.8	1.5	12.4	10.6	11.5	13.9	12.8	13.4
1979-80	2.5	3.9	3.2	19.1	17.3	18.2	2.0	0.9	1.5	12.1	10.5	11.3	13.6	12.8	13.2
1980-81	2.5	4.0	3.2	19.5	17.6	18.5	1.9	1.0	1.5	12.3	10.7	11.5	13.7	13.1	13.4
1981-82	2.5	4.3	3.4	20.8	19.2	20.1	2.1	1.1	1.6	13.1	11.7	12.4	14.6	14.2	14.4
1982-83	2.4	4.1	3.3	23.0	20.9	22.0	2.4	1.0	1.7	14.6	12.7	13.6	16.0	15.1	15.6

Table 3.1 (continued) Alberta

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	10.8	8.8	9.8	26.8	18.4	22.6	6.5	1.7	4.1	18.7	11.7	15.2	25.2	17.0	21.1
1971-72	13.0	8.8	10.9	26.7	17.3	22.0	5.9	1.5	3.7	17.9	10.6	14.2	25.4	15.6	20.5
1972-73	12.7	9.0	10.9	23.8	15.7	19.8	6.0	2.2	4.1	16.5	10.1	13.3	24.0	15.4	19.7
1973-74	11.9	8.7	10.4	22.8	16.1	19.5	5.6	2.2	3.9	16.0	10.5	13.3	23.2	15.8	19.5
1974-75	11.4	8.7	10.1	21.9	16.6	19.3	4.9	1.8	3.4	15.2	10.7	13.0	22.1	16.0	19.1
1975-76	10.2	10.5	10.3	21.9	17.1	19.5	4.8	1.8	3.3	15.0	11.0	13.0	21.1	17.2	19.2
1976-77	10.3	11.0	10.7	20.4	17.1	18.8	4.6	1.9	3.3	13.9	10.8	12.4	20.0	17.3	18.7
1977-78	10.0	10.7	10.3	18.5	16.3	17.5	4.0	1.9	3.0	12.4	10.3	11.4	18.2	16.5	17.4
1978-79	9.5	10.5	10.0	16.5	15.2	15.8	3.5	1.8	2.7	11.0	9.5	10.3	16.4	15.5	16.0
1979-80	8.9	10.4	9.6	14.9	14.2	14.6	3.2	1.8	2.5	9.9	9.0	9.4	14.9	14.9	14.9
1980-81	8.7	9.8	9.3	14.7	14.0	14.3	3.0	1.8	2.4	9.5	8.7	9.1	14.4	14.3	14.4
1981-82	8.9	10.1	9.5	15.1	15.1	15.1	2.9	1.8	2.4	9.6	9.2	9.4	14.5	14.8	14.7
1982-83	9.9	11.2	10.5	16.6	16.5	16.5	3.0	2.0	2.5	10.3	9.9	10.1	15.7	16.0	15.8

Table 3.1 (continued) British Columbia

Academic year	Community college 18 to 21			Undergraduate 18 to 21			Graduate 22 to 24			Subtotal university 18 to 24			Total postsecondary 18 to 24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1970-71	10.4	7.2	8.8	21.7	14.8	18.3	5.5	1.7	3.6	15.0	9.4	12.3	21.2	13.7	17.5
1971-72	10.2	7.0	8.6	19.8	13.7	16.8	5.0	1.6	3.3	13.5	8.5	11.0	19.4	12.4	15.9
1972-73	9.0	7.1	8.1	18.0	12.4	15.2	4.8	1.8	3.3	12.4	7.9	10.2	17.7	12.0	14.9
1973-74	9.0	7.1	7.5	17.6	12.4	15.0	4.4	1.7	3.1	12.1	8.0	10.1	17.4	12.1	14.8
1974-75	10.1	8.9	9.5	17.9	13.4	15.7	3.8	1.5	2.7	12.1	8.4	10.3	18.0	13.6	15.8
1975-76	9.8	8.8	9.3	18.2	14.2	16.2	3.6	1.5	2.5	12.1	8.8	10.5	17.8	14.0	15.9
1976-77	9.3	9.0	9.2	17.1	14.0	15.6	3.7	1.5	2.6	11.5	8.8	10.1	16.9	14.0	15.5
1977-78	9.4	9.1	9.3	16.4	13.7	15.0	3.3	1.5	2.4	10.9	8.5	9.7	16.4	13.7	15.1
1978-79	9.4	9.1	9.2	15.6	13.3	14.4	3.3	1.6	2.4	10.4	8.3	9.3	15.9	13.5	14.7
1979-80	8.7	9.1	8.9	15.2	13.1	14.2	3.5	1.8	2.6	10.3	8.3	9.3	15.4	13.5	14.4
1980-81	8.8	9.5	9.2	15.0	13.1	14.0	3.7	2.0	2.8	10.2	8.3	9.2	15.3	13.7	14.5
1981-82	8.8	9.7	9.2	14.8	13.5	14.2	3.6	2.1	2.9	10.1	8.6	9.3	15.2	14.0	14.6
1982-83	10.0	10.5	10.2	15.2	14.3	14.7	3.8	2.3	3.0	10.3	9.0	9.7	16.1	14.9	15.5

Source: Statistics Canada, Education in Canada, 1983 Catalogue 81-229.

Table 3.2 Retention Rate of Grade 12 Enrolment Related to Grade 2 Enrolment 10 Years Earlier by Province, 1973-74 to 1982-83

Province	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83
Newfoundland*	63.5	65.8	62.8	70.2	67.9	67.3	72.9	75.8
Prince Edward Island	50.5	50.1	57.2	54.7	53.8	67.3	67.3	69.6	69.9	77.2
Nova Scotia	51.7	53.9	57.9	57.2	57.3	56.9	59.5	60.3	62.1	69.2
New Brunswick	60.0	60.3	62.5	66.0	66.9	68.3	71.0	69.9	74.1	77.5
Quebec*	78.3	80.1	87.6	94.9	92.1	91.1	86.8	83.1	89.6	92.2
Ontario	66.0	67.1	69.8	71.5	70.9	71.3	74.0	76.1	80.0	86.8
Manitoba	68.7	65.6	69.1	71.5	66.2	68.3	72.4	72.4	74.3	83.8
Saskatchewan	69.7	68.6	70.2	69.6	67.3	70.1	73.6	71.1	72.4	76.5
Alberta	84.1	81.6	83.4	81.0	76.3	72.3	71.5	71.3	75.3	79.7
British Columbia	70.5	70.6	72.8	71.7	72.9	74.0	73.7	72.1	75.2	80.1
Canada	70.8	71.5	75.2	77.5	75.6	75.5	75.9	75.3	79.5	84.4

* Grade 11 in Newfoundland; secondary V in Quebec; adjusted for movement of population.

Source: Statistics Canada, Education in Canada, 1983, Table 28; 1981, Table 25; 1980, Table 25; 1975, Table 28. Cat. 81-229.

Table 3.3 Postsecondary Enrolment, Canada and Provinces, 1978-79 to 1982-83

Level and year	Canada	New- found- land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Full-time:											
Community college:											
1978-79	249,768	1,960	770	2,768	1,656	137,753	64,499	3,110	2,397	17,411	17,444
1979-80	252,146	2,019	782	2,793	1,791	134,185	70,164	3,057	2,375	17,872	17,108
1980-81	260,827	2,225	820	2,919	1,888	135,405	75,846	3,459	2,412	17,900	17,953
1981-82	273,398	2,384	894	2,713	1,963	141,456	80,605	3,556	2,555	18,795	18,477
1982-83	295,586	2,576	905	2,834	2,162	150,234	89,326	3,609	2,472	20,790	20,610
University:											
Undergraduate:											
1978-79	326,520	5,718	1,390	16,298	10,457	71,884	136,782	15,434	13,681	27,687	27,189
1979-80	329,591	6,136	1,332	16,107	10,415	75,653	137,327	14,743	13,558	27,046	27,274
1980-81	337,915	6,270	1,321	16,553	10,744	77,598	141,901	14,612	13,805	27,664	27,447
1981-82	354,752	7,094	1,390	17,771	11,500	79,506	148,571	15,642	14,973	29,923	28,382
1982-83	376,216	8,332	1,596	19,148	12,510	82,206	155,824	17,526	16,698	32,715	29,661
Graduate:											
1978-79	41,453	443	-	1,634	447	12,133	17,614	1,583	765	3,484	3,350
1979-80	41,768	462	-	1,599	464	12,395	17,277	1,585	777	3,496	3,713
1980-81	44,702	471	-	1,649	508	13,334	18,315	1,953	847	3,556	4,137
1981-82	47,159	537	-	1,687	541	14,056	19,303	2,074	877	3,822	4,292
1982-83	50,173	569	-	1,890	643	15,056	19,951	2,268	920	4,234	4,642
Total university:											
1978-79	367,973	6,161	1,390	17,932	10,904	84,017	154,396	17,017	14,446	31,171	30,539
1979-80	371,359	6,598	1,332	17,706	10,879	88,048	154,604	16,328	14,335	30,542	30,987
1980-81	382,617	6,741	1,321	18,202	11,252	90,932	160,216	16,565	14,584	31,220	31,584
1981-82	401,911	7,631	1,390	19,458	12,041	93,562	167,874	17,716	15,820	33,745	32,674
1982-83	426,389	8,901	1,596	21,038	13,153	97,262	175,775	19,794	17,618	36,949	34,303
Part-time university:											
Undergraduate:											
1978-79	186,691	2,867	817	5,517	3,681	71,108	67,958	9,587	7,136	7,728	10,292
1979-80	199,252	3,213	724	5,352	3,827	77,083	72,377	9,498	7,201	8,501	11,476
1980-81	212,993	3,479	705	5,279	3,371	83,636	75,641	9,930	7,379	10,902	12,671
1981-82	219,485	3,488	763	5,799	4,052	83,056	79,213	11,154	7,782	10,472	13,706
1982-83	233,051	4,012	663	5,798	4,093	85,355	85,366	12,156	8,296	12,853	14,459
Graduate:											
1978-79	29,650	340	-	1,115	472	9,942	12,178	1,476	644	1,781	1,702
1979-80	30,614	304	-	1,172	485	10,881	12,123	1,422	665	1,775	1,787
1980-81	32,135	473	18	1,065	491	11,915	12,178	1,516	722	1,804	1,953
1981-82	32,390	448	18	1,086	569	12,110	11,970	1,579	637	1,856	2,117
1982-83	33,329	374	-	1,027	526	12,918	11,953	1,689	716	2,004	2,122
Total:											
1978-79	216,341	3,207	817	6,632	4,153	81,050	80,136	11,063	7,780	9,509	11,994
1979-80	229,866	3,517	724	6,524	4,312	87,964	84,500	10,920	7,866	10,276	13,263
1980-81	245,128	3,952	723	6,344	3,862	95,551	87,819	11,466	8,101	12,706	14,624
1981-82	251,875	3,936	781	6,885	4,621	95,166	91,183	12,733	8,419	12,328	15,823
1982-83	266,380	4,386	663	6,825	4,619	98,273	97,319	13,845	9,012	14,857	16,581

Source: Statistics Canada, Education in Canada, 1983.

Table 3.4 **Distribution of Full-Time Students in Postsecondary Programs
of Community Colleges by Age, Fall 1981¹**

	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total
Under 17	1.5	-	0.1	0.1	1.7	0.1	-	-	-	0.1	0.1
17	16.9	1.2	2.0	6.0	61.8	4.2	0.6	3.7	1.5	3.1	3.8
18	22.3	20.5	21.1	31.2	27.4	19.0	19.7	24.6	19.5	21.0	19.6
19	19.1	20.9	23.4	23.1	4.5	24.2	21.3	24.3	22.0	19.6	23.1
20	14.4	16.3	17.4	12.0	1.3	18.1	13.9	14.6	15.0	13.5	16.9
21	8.2	12.8	9.9	7.0	0.7	10.9	10.2	8.7	9.7	9.6	10.5
22	5.3	6.5	6.3	4.2	0.5	6.2	7.8	5.0	7.2	6.7	6.4
23	3.8	6.5	4.3	4.0	0.3	3.8	5.2	3.6	4.6	4.6	4.0
24	2.5	4.4	3.6	3.1	0.2	2.6	4.0	3.3	3.5	3.6	2.9
25-29	4.1	7.5	8.2	6.5	0.6	6.1	10.1	6.9	10.1	10.1	7.2
30-34	1.1	1.8	2.1	2.2	0.4	2.4	3.9	2.3	3.5	4.4	2.8
Over 34	0.8	1.6	1.6	0.6	0.6	2.4	3.3	3.0	3.4	3.7	2.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mdn. Age	18	19	19	19	17	19	20	19	19	19	19
# Reporting	1492	742 [*]	1207 [*]	1335	47,100	83,334 [*]	2760	2363	13,122 [*]	17,383 [*]	123,738 [*]

^{*} Includes some trades level students

¹ Data available for new entrants only and not available by year in program.

Source: Statistics Canada cat. 81-222

Table 3.5 Full-time Enrolment in Career Programs of Community Colleges, by Field of Study and Sex, Canada and Provinces, 1982-83

Field of study and sex	Canada	New- found- land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
Arts	M.	8,527	-	45	-	12	5,139	79	-	949	792
	F.	11,991	-	58	-	45	6,042	101	-	1,281	1,176
	T.	20,518	-	103	-	57	11,181	180	-	2,230	1,968
Business:											
Secretarial	M.	73	-	1	-	-	22	-	-	9	4
	F.	13,119	141	139	81	-	3,864	27	31	978	70
	T.	13,192	141	140	81	-	3,886	27	31	987	74
Management and administration	M.	14,166	30	30	90	161	5,980	462	92	976	941
	F.	14,876	23	15	67	292	6,209	330	126	1,116	753
	T.	29,042	53	45	157	453	11,921	792	218	2,092	1,694
Data processing	M.	7,637	43	27	46	23	2,638	237	25	376	375
	F.	6,989	56	15	18	44	3,215	2890	15	342	303
	T.	14,626	99	42	64	67	5,853	328	40	718	678
Financial management (business and commerce)	M.	3,178	135	20	11	-	1,568	-	22	145	348
	F.	4,427	67	48	12	-	2,245	-	34	166	406
	T.	7,605	202	68	23	-	3,813	-	56	311	754
Other	M.	3,967	13	15	21	-	688	123	23	196	421
	F.	4,871	28	24	49	-	733	74	68	247	429
	T.	8,838	41	39	70	-	1,421	197	91	443	850
Total	M.	29,021	221	93	168	184	13,884	822	162	1,702	2,089
	F.	44,282	315	241	227	336	19,394	522	274	2,849	1,961
	T.	73,303	536	334	395	520	32,043	1,344	436	4,551	4,050
Community and social services	M.	6,869	17	58	20	-	2,819	83	20	413	327
	F.	17,557	18	50	40	-	8,579	150	75	1,584	633
	T.	24,426	35	108	60	-	11,398	233	95	1,997	960
Education	M.	86	-	-	86	-	-	-	-	-	-
	F.	248	-	-	248	-	-	-	-	-	-
	T.	334	-	-	334	-	-	-	-	-	-
Engineering:											
Architecture	M.	5,250	79	34	8	-	2,367	22	18	450	424
	F.	977	17	7	1	-	454	2	6	170	55
	T.	6,227	96	41	9	-	2,821	24	24	620	479
Mechanical	M.	6,934	74	8	195	95	2,460	88	248	664	190
	F.	148	-	3	6	-	58	-	3	8	6
	T.	7,082	74	11	201	95	2,518	88	251	672	196
Engineering general	M.	6,789	128	-	118	180	1,712	192	140	906	156
	F.	829	1	-	11	45	304	12	18	174	14
	T.	7,618	129	-	129	225	3,561	204	158	1,080	170
Other	M.	2,557	38	-	18	40	1,033	-	-	121	-
	F.	311	9	-	-	1	107	-	-	8	-
	T.	2,868	47	-	18	41	1,140	-	-	129	-
Total	M.	21,530	319	42	339	315	9,324	302	406	2,141	770
	F.	2,265	27	10	18	46	869	14	27	360	75
	T.	23,795	346	52	357	361	10,143	316	433	2,501	845

Table 3.5 (continued)

Field of study and sex	Canada	New- found- land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia
Medical:											
Nursing	M. 1,519 F. 20,411 T. 21,930	21 918 939	1 176 177	27 827 854	22 625 647	961 5,823 6,784	270 6,597 6,867	50 1,019 1,069	42 926 968	33 1,679 1,712	92 1,821 1,913
Medical treatment technology	M. 1,637 F. 5,151 T. 6,788	41 123 164	- 4 4	23 134 157	6 88 94	313 1,917 2,230	1,017 1,913 2,930	11 91 102	13 134 147	159 444 603	54 303 357
Other	M. 629 F. 1,394 T. 2,023	- - -	- - -	1 9 10	- - -	171 830 1,001	189 200 389	22 36 58	11 60 71	112 183 295	123 76 199
Total	M. 3,785 F. 26,956 T. 30,741	62 1,041 1,103	1 180 181	51 970 1,021	28 713 741	1,445 8,570 10,015	1,476 8,710 10,816	83 1,146 1,229	66 1,120 1,186	304 2,306 2,610	269 2,200 2,469
Natural resources	M. 7,714 F. 2,898 T. 10,612	126 10 136	45 20 65	68 15 83	110 15 125	2,448 1,045 3,493	3,040 1,089 4,129	6 - 6	107 29 136	1,225 509 1,734	514 162 676
Technologies:											
Chemical	M. 1,718 F. 1,245 T. 2,963	39 46 85	- - -	10 6 16	34 16 50	516 439 955	853 587 1,440	32 18 50	- - -	186 92 278	48 41 89
Electrical/electronic	M. 15,790 F. 477 T. 16,267	272 1 273	59 3 62	166 4 170	297 11 308	7,225 247 7,472	5,700 143 5,843	246 5 251	147 7 154	1,032 33 1,065	646 23 669
Total	M. 17,508 F. 1,722 T. 19,230	311 47 358	59 3 62	176 10 186	331 27 358	7,741 686 8,427	6,553 730 7,283	278 23 301	147 7 154	1,218 125 1,343	694 64 758
Transportation	M. 1,205 F. 109 T. 1,314	61 1 62	- - -	355 25 380	- - -	343 62 405	350 18 368	- - -	- - -	76 2 78	20 1 21
Other miscellaneous programs	M. 1,822 F. 1,221 T. 3,043	- - -	- - -	- - -	- - -	225 69 294	1,314 1,056 2,370	- - -	5 - 5	278 96 374	- - -
Not reported	M. 195 F. 140 T. 335	- - -	- - -	17 1 18	- - -	40 38 78	132 95 225	- - -	- - -	- - -	6 8 14
Grand total	M. 98,262 F. 109,389 T. 207,651	1,117 1,459 2,576	343 562 905	1,280 1,554 2,834	980 1,182 2,162	34,121 40,426 74,547	44,031 45,295 89,326	1,653 1,956 3,609	913 1,532 2,445	8,306 9,112 17,418	5,481 6,280 11,761

Source: Statistics Canada, Education in Canada, 1983.

Table 3.6 Females as a Proportion of all Persons Enrolled in University Full-Time by Level Canada and Provinces, 1960, 1970 and 1980, in percent

	Undergraduate			Graduate		
	1960	1970	1980	1960	1970	1980
CANADA	24.8	36.7	46.0	15.1	22.3	36.1
Newfoundland	32.0	36.7	48.9	15.2	24.3	32.5
Prince Edward Island	31.3	42.0	48.7	NA	NA	NA
Nova Scotia	26.2	39.5	48.7	23.1	24.7	35.7
New Brunswick	22.0	36.8	45.5	6.7	18.7	31.3
Quebec	20.4	33.0	45.2	17.0	25.5	37.4
Ontario	25.6	35.7	45.7	13.2	21.3	36.1
Manitoba	27.8	38.3	46.0	10.8	20.5	31.6
Saskatchewan	26.1	39.1	46.9	9.5	15.0	34.0
Alberta	30.9	40.6	47.5	10.9	21.1	35.0
British Columbia	30.0	40.1	46.1	20.8	23.2	36.4

Source: Dallaire L., and Belleau, J., The 15-24 Years and Education, Study of the Canadian School System, Social Trends Analysis Directorate, Secretary of State, unpublished documents (based on data from Statistics Canada, 1978 and 1984, Catalogue #81-568 and 81-204).

Table 3.7 Persons Enrolled Part-Time as a Proportion of Total Enrolment in Universities, by Level and by Age in Per Cent Canada and Provinces, 1972-73, and 1981-82

	1972-73		1981-82					
	Under-graduate	Graduate	Undergraduate			Graduate		
			Total	Under 25 yrs & over	25 yrs & over	Total	Under 25 yrs & over	25 yrs & over
CANADA	31.2	35.3	38.2	14.7	77.5	40.7	16.6	45.8
Newfoundland	46.7	-	33.0	13.1	81.0	45.5	14.3	49.3
Prince Edward Island	36.8	-	35.4	14.5	82.1	100.0	-	100.0
Nova Scotia	17.5	34.9	24.6	7.6	60.6	39.1	10.6	43.0
New Brunswick	32.6	NA	26.1	7.8	71.8	51.3	9.0	61.6
Quebec	44.2	42.2	51.5	20.1	82.5	46.3	24.0	51.3
Ontario	30.7	35.8	34.8	12.6	79.6	38.3	13.4	44.1
Manitoba	32.6	NA	41.6	23.8	80.0	43.2	16.5	48.7
Saskatchewan	21.3	NA	34.2	14.3	70.2	42.9	14.5	47.5
Alberta	20.7	27.3	25.9	10.2	58.0	32.7	12.3	36.1
British Columbia	14.5	NA	32.6	16.6	65.4	33.0	7.3	36.8

Source: Dallaire L., and Belleau. J., The 15-24 Years and Education. Study of the Canadian School System, Social Trends Analysis Directorate, Secretary of State, Ottawa, March 1984 (based on data from Statistics Canada, 1976 and 1984, Catalogue #81-204).

Table 3.8 University Enrolment by Age, Province, Level and Registration Status, 1981-82

Age	Newfoundland			Prince Edward Island			Nova Scotia			New Brunswick			Quebec			Ontario			Manitoba		
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time			
TOTAL ENROLMENT	7,631	3,936	1,390	781	19,458	6,885	12,041	4,621	93,562	95,166	168,874	91,183	17,716	12,73							
Total undergraduate	7,094	3,488	1,390	763	17,771	5,799	11,500	4,052	79,506	83,056	148,471	79,213	15,642	11,15							
Less than 17 years	63	1	-	2	19	1	6	3	7	59	30	6	4								
17 "	1,670	47	48	4	258	4	203	6	128	105	576	50	144	7							
18 "	1,351	54	317	10	2,878	37	2,303	39	1,154	100	6,222	231	2,960	43							
19 "	1,138	73	309	28	3,453	115	2,309	54	9,702	443	29,534	1,036	2,990	52							
20 "	769	156	228	31	3,116	152	1,897	113	14,714	1,253	30,418	1,937	2,756	55							
21 "	692	140	197	33	2,514	205	1,684	136	15,043	2,386	27,951	2,881	2,211	74							
22 "	404	167	92	38	1,532	261	908	170	12,027	3,544	20,755	4,219	1,373	74							
23 "	218	159	42	32	949	247	573	173	7,678	4,217	11,470	4,675	848	74							
24 "	201	187	39	38	656	248	398	172	4,854	4,333	6,089	4,198	556	55							
25 "	110	130	18	32	483	212	253	185	3,159	4,226	3,770	3,829	391	52							
26 "	93	138	25	45	343	206	200	146	2,247	4,111	2,426	3,590	240	47							
27 "	63	165	15	28	221	192	125	164	1,660	4,030	1,820	3,425	217	47							
28 "	70	164	13	39	184	200	96	178	1,288	3,764	1,322	3,142	160	36							
29 "	45	164	4	30	147	168	84	208	963	3,611	1,064	3,174	128	36							
30-34 years	109	800	14	127	437	893	244	841	2,872	7,841	2,785	15,736	322	1,65							
35-39 "	58	506	14	101	203	592	118	571	1,127	13,988	1,096	11,404	128	1,20							
40-44 "	21	273	3	46	74	398	46	343	445	7,168	469	6,631	45	68							
45-49 "	3	95	6	35	44	220	13	180	196	3,775	245	3,796	30	45							
50-54 "	7	35	-	19	17	129	13	104	79	2,234	136	2,077	14	22							
55-59 "	4	16	1	13	2	61	3	57	30	980	59	1,087	2	11							
60 years and over	4	17	3	26	12	68	12	99	16	704	62	1,585	5	19							
Not reported	1	1	2	6	229	1,190	12	110	117	184	272	504	118	8							
Mode	17	24	18	26	19	22	19	29	21	24	20	23	19	2							
Median	19	29	20	29	20	30	20	31	21	31	21	30	20	2							
Total graduate	537	448	-	18	1,687	1,086	541	569	14,056	12,110	19,303	11,970	2,074	1,57							
Less than 21 years	2	-	-	-	-	2	-	-	12	4	17	3	6								
21 years	1	-	-	-	36	2	5	-	130	33	168	7	35								
22 "	18	1	-	-	129	8	48	2	704	131	883	78	126	1							
23 "	22	4	-	-	152	18	71	2	1,242	382	1,856	223	149	3							
24 "	35	8	-	-	171	28	77	16	1,593	615	2,130	470	204	4							
25 "	45	16	-	-	162	51	53	20	1,448	769	2,029	672	214	7							
26 "	39	17	-	-	160	54	47	23	1,300	871	1,763	689	204	8							
27 "	36	21	-	2	125	49	42	26	1,208	853	1,631	760	165	10							
28 "	30	19	-	1	95	49	35	26	990	836	1,480	741	143	9							

Table 3.8 (continued)

	Newfoundland		Prince Edward Island		Nova Scotia		New Brunswick		Quebec		Ontario		Manitoba	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
29 "	27	28	-	-	85	42	20	26	810	777	1,331	789	133	7
30-34 years	92	117	-	5	322	276	71	198	2,574	3,224	3,638	3,404	431	43
35-39 "	28	48	-	4	137	199	40	121	1,120	1,884	1,308	2,086	163	29
40-44 "	9	18	-	1	54	89	18	60	525	867	536	1,019	39	16
45-49 "	3	7	-	2	26	44	6	22	187	421	233	537	33	7
50-54 "	2	7	-	3	14	28	4	15	107	248	117	259	14	4
55-59 "	-	3	-	-	2	10	2	3	33	92	47	133	7	1
60 years and over	1	2	-	-	5	5	1	4	24	56	42	79	5	1
Not reported	147	132	-	-	12	132	1	5	49	47	94	21	3	
Mode	25	30	-	27	24	35	24	33	24	26	24	29	25	3
Median	27	31	-	35	27	29	26	33	27	31	27	32	27	3

Table 3.8 (continued)

	Saskatchewan				Alberta				British Columbia				Canada			
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time		Part-time					
									Male	Female	Male	Female	Male	Female		
TOTAL ENROLMENT	15,820	8,419	33,745	12,238	32,674	15,823	218,794	183,117	401,911	107,176	144,699	251,875				
Total undergraduate	14,973	7,782	29,923	10,472	28,382	13,706	189,231	165,521	354,752	87,923	131,562	219,485				
Less than 17 years	5	21	9	2	13	1	82	74	156	56	49	105				
17 years	181	24	283	10	290	15	1,752	2,029	3,781	137	198	335				
18 "	2,597	108	4,218	186	3,747	211	12,947	14,800	27,747	493	918	1,411				
19 "	2,494	171	4,537	260	4,005	422	29,561	30,910	60,471	1,220	1,907	3,127				
20 "	2,403	252	4,460	289	4,025	580	32,959	31,827	64,786	2,207	3,112	5,319				
21 "	2,084	307	4,313	370	4,079	726	32,034	28,734	60,768	3,422	4,502	7,924				
22 "	1,299	388	3,013	496	3,096	922	25,546	18,953	44,499	4,870	6,084	10,954				
23 "	857	427	2,059	537	2,097	850	16,852	9,939	26,791	5,557	6,438	11,995				
24 "	634	402	1,463	606	1,386	783	10,376	5,900	16,276	5,262	6,264	11,526				
25 "	510	411	1,083	616	941	734	6,800	3,918	10,718	4,946	5,955	10,901				
26 "	344	440	821	584	754	653	4,620	2,873	7,493	4,736	5,653	10,389				
27 "	281	346	654	555	570	643	3,410	2,216	5,626	4,616	5,463	10,079				
28 "	238	346	465	520	474	567	2,517	1,793	4,310	4,239	5,043	9,282				
29 "	166	332	422	512	349	580	1,926	1,446	3,372	4,141	5,007	9,148				
30-34 years	486	1,453	1,121	2,066	986	2,229	4,765	4,611	9,376	18,234	25,408	43,642				
35-39 "	205	910	540	1,272	386	1,447	1,371	2,504	3,875	11,346	20,653	31,999				
40-44 "	91	549	223	738	138	850	415	1,140	1,555	5,400	12,281	17,681				
45-49 "	46	332	134	359	74	501	190	601	791	2,793	6,954	9,747				
50-54 "	11	210	70	207	36	300	102	281	383	1,510	4,032	5,542				
55-59 "	15	94	20	131	25	160	57	104	161	757	1,953	2,710				
60 years and over	6	71	9	125	15	312	75	69	144	1,108	2,097	3,205				
Not reported	20	130	6	31	896	220	874	799	1,673	873	1,591	2,464				
Mode	18	26	19	25	21	22	20	20	20	23	23	23				
Median	20	29	21	29	21	28	21	21	21	29	31	30				
Total graduate	847	637	3,822	1,856	4,292	2,117	29,563	17,596	47,159	19,253	13,137	32,390				
Less than 21 years	-	-	3	-	3	-	20	23	43	5	4	9				
21 years	6	-	28	3	37	1	237	209	446	21	30	51				
22 "	39	2	115	10	130	7	1,175	1,017	2,192	133	122	255				
23 "	60	9	249	37	251	16	2,331	1,721	4,052	423	302	725				
24 "	78	20	317	50	349	37	3,099	1,855	4,954	756	536	1,292				
25 "	76	29	328	84	370	62	3,050	1,675	4,725	1,017	761	1,778				
26 "	82	37	367	88	367	79	2,849	1,480	4,329	1,168	778	1,946				
27 "	69	22	330	104	356	101	2,728	1,234	3,962	1,254	785	2,039				
28 "	62	39	321	117	329	101	2,378	1,107	3,485	1,280	742	2,022				

Table 3.8 (continued)

	Saskatchewan				Alberta				British Columbia				Canada			
	Full-time		Part-time		Full-time		Part-time		Full-time		Part-time		Full-time		Part-time	
	time	time	time	time	time	time	time	time	Male	Female	Total	Male	Female	Total	Male	Total
29 "	62	49			275	120	281	147	2,008	1,016	3,024	1,274	783	2,057		
30-34 years	179	189			827	562	985	675	6,041	3,078	9,119	5,707	3,375	9,082		
35-39 "	79	122			364	346	461	445	2,118	1,582	3,700	3,366	2,183	5,549		
40-44 "	29	59			151	165	181	217	770	772	1,542	1,428	1,232	2,660		
45-49 "	14	25			85	93	82	123	287	382	669	639	710	1,349		
50-54 "	5	15			39	48	43	53	134	211	345	318	400	718		
55-59 "	4	7			13	21	15	19	52	71	123	135	168	303		
60 years and over	1	5			2	3	11	6	34	58	92	92	79	171		
Not reported	2	8			8	5	41	28	252	105	357	237	147	384		
Mode	26	29			26	30	25	29	24	24	24	28	27	29		
Median	28	33			28	32	28	33	27	27	27	31	32	31		

Source: Statistics Canada, Universities: Enrolments and Degrees, 1981, Cat. 81-204.

Table 3.9 Summary - Enrolment by Province, Registration Status, Field of Study, Level, Sex, Age, Mother Tongue and Citizenship, 1981-82

	Saskatchewan			Alberta			British Columbia			Canada		
	Full-time	Part-time		Full-time	Part-time		Full-time	Part-time		Full-time	Part-time	
TOTAL ENROLMENT	15,820	8,419		33,745	12,328		32,674	15,823		401,911	251,875	
Level/field:												
Total undergraduate	14,973	7,782		29,923	10,472		28,382	13,706		354,752	219,485	
Education	2,786	1,595		5,481	795		3,770	2,227		37,421	30,261	
Fine/applied arts	349	110		880	151		907	338		12,714	5,238	
Humanities	1,154	201		1,121	278		1,379	835		23,855	12,063	
Social sciences	3,872	2,046		5,424	1,586		5,606	2,082		99,488	57,746	
Agriculture/biological sciences	1,719	93		1,308	58		1,579	280		19,751	1,884	
Engineering/applied sciences	1,179	54		3,227	41		2,420	142		39,875	3,577	
Health professions	1,095	86		2,442	237		1,706	182		22,701	4,655	
Mathematics/physical sciences	1,111	270		1,837	206		1,414	414		22,628	4,436	
Other	1,708	3,327		8,203	7,120		9,601	7,206		76,319	99,625	
Total graduate	847	637		3,822	1,856		4,292	2,117		47,159	32,390	
Education	158	298		742	853		573	1,165		4,440	9,899	
Fine/applied arts	22	11		82	15		164	22		1,038	401	
Humanities	83	39		315	144		535	112		6,697	3,653	
Social sciences	197	166		717	475		1,278	537		14,105	11,600	
Agriculture/biological sciences	188	29		302	42		445	53		3,207	637	
Engineering/applied sciences	88	16		424	149		286	59		3,962	2,482	
Health professions	26	5		834	15		540	32		9,153	878	
Mathematics/physical sciences	79	31		383	41		417	58		4,029	1,192	
Other	6	42		23	122		54	79		528	1,648	
Sex:												
Male	8,426	3,155		17,735	5,370		17,691	6,724		218,794	107,176	
Female	7,394	5,264		16,010	6,958		14,983	9,099		183,117	144,699	
Not reported	-	-		-	-		-	-		-	-	
Age:												
Under 18 years	186	45		292	12		303	16		3,937	440	
18-24 years	12,551	2,086		24,775	2,844		23,205	4,555		313,025	54,588	
25 years and over	3,061	6,150		8,664	9,436		8,229	11,004		82,919	193,999	
Not reported	22	138		14	36		937	248		2,030	2,848	
Mother tongue:												
English	3,729	2,608		179	29		255	6		198,289	108,977	
French	33	34		8	1		10	-		78,100	81,599	
Other languages	217	138		12	2		11	1		40,709	17,875	
Not reported	11,841	5,639		33,546	12,296		32,398	15,816		84,813	43,424	
Citizenship:												
Canadian	14,890	7,337		30,271	11,395		28,549	13,765		355,994	233,589	
Non-Canadian	898	335		3,469	722		2,892	1,608		43,991	16,328	
Land immigrant	321	237		1,626	603		1,487	1,018		16,220	11,766	
Visa student	577	98		1,843	119		1,405	590		27,771	4,562	
Not reported	32	747		5	211		1,233	450		1,926	1,958	

Source: Statistics Canada, Universities: Enrolments and Degrees, 1981, Cat. 81-204.

Table 3.10 Full-Time and Part-Time Foreign University Students by Province
1974/75 - 1982/83

Province	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83*
Nfld.	243	249	194	221	219	160	174	220	193
P.E.I.	36	67	58	47	49	37	26	32	24
N.S.	1003	1164	1185	1316	1369	1408	1541	1560	1616
N.B.	314	349	424	456	472	489	511	602	767
Que.	4820	5780	7540	6863	6644	6586	6689	6862	6782
Ont.	9654	9784	10,507	10,323	10,524	11,157	13,138	17,188	18,747
Man.	978	1166	1444	1587	1488	1342	1284	1504	1880
Sask.	395	733	1029	1082	1071	872	713	641	715
Alta.	1364	2018	2118	2217	2085	1754	1744	1955	2159
B.C.	1304	1468	1720	1934	1839	1879	2025	2415	2622
Total	19,841	22,788	26,219	26,046	25,760	25,684	27,845	32,979	35,505

Source: Statistics Canada, A Statistical Portrait of Canadian Higher Education, 1983, p. 37.

* estimated exclusively from immigration data.

Note: The following institutions have been estimated exclusively from immigration data:

1974/75 - McGill, Lethbridge

1974/75 and 1975/76 - Technical Univ. of N.S., Mount Saint Vincent, N.S., Moncton, Concordia, Quebec, Brandon, Simon Fraser

1976/77 - P.E.I., Moncton, Concordia, Montreal, Brandon

1976/77 and 1977/78 - Technical Univ. of N.S., Quebec, Simon Fraser

1978/79 and 1979/80 - Technical Univ. of N.S., Moncton, Quebec, Brandon and Simon Fraser

1980/81 - Quebec, Simon Fraser

Table 3.11 Foreign Students as a Percentage of the Total Full-Time Canadian University Enrolment by Academic Level, 1972-1973 to 1982-1983

Year	Undergraduate	Masters	Doctoral
1972-73	3.8	12.1	13.9
1973-74	4.8	13.2	15.3
1974-75	4.4	16.7	16.6
1975-76	4.8	15.8	17.8
1976-77	4.8	15.8	17.8
1977-78	5.1	15.8	24.1
1978-79	5.1	15.1	24.9
1979-80	5.0	14.8	24.9
1980-81	5.1	15.0	25.2
1981-82	5.6	16.0	27.0
1982-83	6.0	15.8	28.5

Source: Max von Zur-Muehlen (Statistics Canada), Table prepared for the Commission on Canadian Studies, July, 1983.

Reproduced from Some Questions of Balance. Report of the Commission on Canadian Studies, 1984, p. 240.

Table 3.12 Foreign Student Enrolment in Secondary and Postsecondary Institutions by Geographic Origin, by Conventional Groupings

Area	Post-secondary	% of column total
Africa (47) ¹	3,973	(11.9%)
Americas and Caribbean (48)		
U.S.A.	4,168	(12.5%)
Others	4,303	(12.9%)
Area subtotal	8,471	(25.5%)
Asia (24)		
Hong Kong	7,660	(23%)
Malaysia	3,599	(10.8%)
Others	3,892	(11.7%)
Area subtotal	15,151	(45.6%)
Australasia (11)	259	(.8%)
Europe (30)	3,301	(9.9%)
Middle East (14)	2,084	(6.3%)
Grand Totals (174)	33,329	(100%)

¹Numbers in brackets indicate the number of countries in each group.

Source: Commission on Foreign Student Policy. The right mix: the report of the Commission on foreign student policy. Ottawa. 1981, Canadian Bureau for International Education, p. 29, Table 3.

4 ACCESSIBILITY TO POSTSECONDARY EDUCATION IN ONTARIO

Introduction

Ontario's postsecondary education system is one of the most complex and diverse in Canada and its evolution reflects factors unique to the province. Its eight million people represent one-third of Canada's population and, according to the 1981 census, slightly more than half are neither English nor French. This highly diverse population lives in the most industrialized (and third most urbanized) province of the country.

For the most part, the development of Ontario's unique (that is, the only province with Grade 13) educational system has been accompanied by increased bureaucratization with the government playing a dominant role. According to Kymlicka (1978:102):

Indeed, it is possible to view the development of higher education in Ontario over the last 10 or 15 years as being dominated by one characteristic: the governmental takeover of all aspects of postsecondary education either through the creation of new, public institutions or through increased (both absolute and relative) financial support to the existing public and/or private institutions. Interwoven with that trend are the institutional responses to governmental takeover: alternate demands for greater funds and insistence on autonomy; the changing economic and social conditions within the province and the corresponding ideological changes as reflected in the rhetoric and in the articulated aims and objectives of government; and the internal changes of the institutions themselves to government pressures and to faculty and student insistence on greater participation in the governance of the institutions.

In discussing the issue of access, we will first review the growth of the postsecondary education system; second, government policies and practices; and third, who gains access to universities and colleges.

The Growth of the Postsecondary System

Like all other provinces, the postsecondary education system in Ontario experienced a phenomenal growth during the 1960s. This growth took the form of a significant expansion of universities and the creation of community colleges of applied arts and technology (CAATs) (Table 3.1). The rapid increase in the baby boom population of students leaving high school, and "the upgrading of educational requirements for many occupations in commerce, industry, and the public service," were two

important factors that prompted this rapid expansion of postsecondary facilities (Fleming, 1974:86).

As Stager (1984) indicates, "the demand for higher education is not autonomous" since "it can be influenced by public policy" (p. 5). Most notable was the high enrolment rates in colleges during the late 1960s after they were established. In essence, the demand for higher education is influenced by the availability of institutions and programs (Stager, 1984:6).

It might be argued that the Ontario government simply responded to a latent demand for community college education in the 1960s. But this is only a partial explanation since the government deliberately created a special purpose type of postsecondary institution that is different from "community colleges" in other provinces and states.

Postsecondary Participation Rates

Of the approximately 373,900 students registered in Ontario's postsecondary education in fall 1983, 95,322 are enrolled in community colleges, 245,952 at the undergraduate and 32,645 at the graduate levels of universities. In the fall of 1983, 57% of community college students were enrolled in first year programs, 34% were in their second year of program and 9% in their third year (Table 3.3: annual enrolment rates, 1978-83).

Both graduate and undergraduate university enrolments in Ontario actually increased approximately sixfold over the 20-year period, 1962-63 to 1982-83 (including part-time and full-time students). However, the increase has not been steady over the past two decades. In fact, full-time undergraduate and graduate participation rates decreased, starting in 1977-78, and then increased in 1980-81. Today, participation rates are at an all time high. Community college participation rates, in contrast, have consistently increased with little fluctuation (Foot and Pervin, 1983:10).

Universities

As noted earlier, Canada experienced a substantial growth in postsecondary institutions during the late 1950s and mid-1960s. Evidently, the expansion of university facilities in response to the

needs of students wishing to participate meant that the Government of Ontario as well as the public supported the philosophy of educational opportunities for all as long as the economic realities made it feasible. But as Axelrod comments (1982:4):

The assumptions that accompanied the expansion of the universities in the 1960s were remarkably similar to those that combined with the spending restraint of the 1970s. Higher education was valued not for its ideals, but primarily for its products - skilled professionals who would contribute to economic prosperity. So long as they seemed to be fulfilling this function, universities remained an important social priority. But once they produced surplus manpower, redundant programs, and a burdensome addition to the public debt, they no longer appeared to be such profitable social investments.

The expansion of universities meant the creation of new universities, for example Carleton (1957), York (1959), Waterloo (1959) and Trent (1963). In the case of denominational universities like McMaster, Wilfrid Laurier, Ottawa and Windsor, enrolment demands and escalating costs forced them to sever their religious connections in order to receive government support. Enrolment demands (among other factors) brought about the establishment of Laurentian and Guelph as independent institutions with degree-granting status. Today, Ontario has 16 degree granting institutions, including Ryerson Polytechnical Institute.¹ The majority of these universities gained degree-granting status in the 1950s and 1960s.

The increase in the number of universities also meant a corresponding increase in student enrolment. There was a steady increase over the years until 1977 and 1978 when enrolment declined. Since then enrolment increased gradually, levelled off, and in the last three years, university enrolments increased a staggering 27%. "As a result, the capacity of universities has been severely strained. In the fall of 1983, most universities, some for the first time, established enrolment limits on admission to first year in all programs" (COU, May 1984).

¹Ryerson is the only one of its kind in Ontario. Given its board of governors in 1963, it began to grant its own special diplomas/degrees in 1972. The status of its degrees has increased.

Ontario accounts for a quarter of the 65 universities in Canada and it educated some 41% of the nation's graduate students in 1981-82. In engineering, management and computer science, the proportions were 44%; 47% and 48% respectively. In 1982-83, more than 37,000 undergraduate degrees were awarded to students. This represents an increase of almost 9,200 or 25% over the past 10 years. Of that increase, 17% was attributable to growth in arts and science, and 83% to professional and semi-professional fields of study. Full-time undergraduate enrolment today exceeds 165,000, accounting for some 42% of the total enrolment in Canada.

Since the 1960s the high rate of inflation and unemployment has resulted in proportionately lower provincial government support of universities. In fact, while in 1972-73 the provincial government spent 6.6% of its budget (i.e. real expenditure) on universities, in 1982-83 that expenditure decreased by 23% to 5.1%. Also, in 1972-73, while \$2,735 were spent on each full-time student, only \$1,960 were spent in 1982-83, a decrease of 28%. In 1983-84 per student expenditure was \$1,354, or 21% less than the average for the other nine provinces. In terms of overall expenditure, Ontario ranks tenth among the provinces. This raises the questions: What happened to the idea of universities serving the goals of cultural development? What about the commitment to equality of opportunity and universal access to postsecondary education for all students who meet the entry requirements? And do universities no longer assist in qualifying Canadians to contribute to economic growth? Given that the support of universities was highly contingent on existing economic factors, that it helped to mold our cultural growth seemed to be of no significant consequence.

One very significant factor in the examination of universities is the role government plays in their daily operations. As Axelrod notes: "Government agencies in Ontario performed the role of co-ordinators, scrutineers and consultants, but at no time during the expansion phase did they impose pre-determined priorities upon the universities" (1982:214-215).

Community Colleges

Since the 1940s, a number of institutes of technology and institutes of trades and vocation had provided training in apprenticeship programs and trades. However, "the enrolment in these institutions was small in relation to the need for technologists, technicians and other skilled workers" (Fleming, 1974:84). These educational institutions could not sufficiently respond to the increasing number of students who wished to further their postsecondary education. At the same time, there was a shortage of skilled manpower in the technological and semi-professional fields in Ontario. "Simultaneously, the federal government offered generous support for the building of vocational and technical schools as one of its shared-cost programs" (Kymlicka, 1978:119). So the college system was established which, according to the Hon. W. Davis, then minister responsible for colleges and universities (Kymlicka, 1978:119),

goes far towards making a reality of the promise...to provide through education and training not only an equality of opportunity to all sectors of our population, but the fullest possible development of each individual to the limit of his ability.... This expansion of our school system is imperative to meet the need of individual citizens as well as those of society as a whole.... The university doors should always be open to capable and ambitious young men and women.... Students who have completed successfully an appropriate program at one of our colleges of applied arts and technology and who have demonstrated they are prepared to undertake university work, may be admitted to university.... We simply must provide opportunities for the higher education of this segment of our population as well as the university-bound group.

Basically, the colleges were to serve three purposes:

to provide courses of types and levels beyond, or not suited to, the secondary school setting; to meet the needs of graduates from any secondary school program, apart from those wishing to attend university; and to meet the educational needs of adults and out-of-school youth whether or not they are secondary school graduates.

In accordance with the 1965 legislation, the following two to three years saw the establishment of 20 multi-campus colleges absorbing all the trade and vocational institutions (Fleming, 1974:85).

There were enthusiastic predictions in the early days of the colleges that their enrolment would eventually equal or exceed that of universities. While such an expectation might eventually be realized, the situation in 1973-73 was not substantially different

from that in other provinces. Total full-time enrolment was 39,914 compared with 133,400 in universities.

However, limited employment opportunities available to university graduates caused a temporary stabilization of university participation rates while students opted for college programs. Fleming explained that "some employers were expressing a preference for the graduate of a practical college of applied arts and technology program over the graduate from a general university program" (1974:85). Since their establishment, enrolment at community colleges has increased steadily. In fall 1983, there were more than 95,000 full-time (including visa) students enrolled in the 22 CAATs.

The Ontario community college system is an alternative to universities and provides an additional means of ensuring accessibility for rural area students. For this reason, colleges were built not only in large urban centres but in relatively less populated rural communities. The government's insistence that colleges be seen as independent of universities is clearly summarized in the following assessment (Fleming, 1974:85):

(the government) was prepared to do more than encourage the universities to grant credit for a small number of college students who wished to transfer to university programs on the basis of promising records. This policy aroused considerable criticism by those who saw it as a denial of equal educational opportunity. It could, however, be so interpreted only on the grounds that it might make changes in the student's educational plans, should he find he has made the wrong initial choice, unduly difficult to implement.

Despite the claim that community colleges are an alternative to universities, critics see the inability of students to transfer from college to university as a critical flaw in achieving full access at all levels of Ontario's postsecondary system. Yet Kymlicka (1978) notes that since colleges are not "junior colleges" which serve simply as feeder institutions to universities, they therefore have the ability to be responsive to changing market demands and student preferences. This then makes them more capable than any other postsecondary institutions to cater to students (p. 127).

The Question of Transfer between College and University

While many observers agree that community colleges offer an alternative to university, some critics argue that the lack of a specific policy of transfer² between college and university creates a barrier that students often find difficult to overcome. Robert Nixon of the Liberal party states (Hansard, May 31, 1965:3473):

It is enough to say piously that no student with ability will be denied an opportunity to continue. There has to be a clear pathway, whereby these students can take a course that will lead them to placement in university. If these institutions are going to be established,...there are many people who would otherwise be denied...the opportunity for postsecondary education. We are going to be dealing with what has been called first generation students.... These people are going to be forced...into the community college system, through the fact that it is closer to home and it would obviously be cheaper to go there. They will lose the opportunity for higher academic work.

Furthermore, (Hansard, Mr. MacDonald (NDP), June 9, 1966:4483)

If community colleges are going to be sharply oriented to technology, without a core of liberal arts, and with ill-defined and limited opportunities for transfer to university for the brighter students, they will cement the fate of the disadvantaged child. Even if he does overcome earlier handicaps sufficiently to reach high school and complete years in the non-university stream, there is little prospect that he can go beyond the community college.

Those who support the high degree of differentiation among universities and colleges see no need for direct transfer insofar as 'it shows that one is not better than the other, they are just different' (Skolnik, 1984:2).

At a recently held colloquium on "The Transfer Issue" panelists questioned "whether colleges really were an appropriate alternative for very many students who wish to go to university but can't get in. It was

²It is difficult to obtain exact information on transfers from college to universities. In most cases, universities will not report this information specifically, since the ministry merely requires them to report the number of students enrolled from postsecondary non-university. The reluctance of universities to report this information is in part due to the uneasy relationship between these institutions regarding the recruitment of students.

emphasized that colleges and universities play very different roles and one is not substitutable for the other" (Skolnik, 1984:2). Rather than being a real alternative to university, colleges help take the pressure of students off universities. However, there is some transfer taking place between colleges and universities. Statistics Canada reports that the number of students with community college experience entering university is about 2,500 out of a total undergraduate enrolment of 156,000. According to the Ontario Federation of Students this represents a proportion of about 2% (OFS, 1984:21). Two universities, Lakehead and Windsor, currently admit transfer students from community college. Skolnik (1984) claims that transfers from colleges to universities have been declining due to an increased emphasis on job-related programs. According to Skolnik, this situation is not unique to Ontario for similar trends have been identified in the United States.

Emphasizing that universities and colleges play important occupational roles, Tom Norton, Academic Vice President, Humber College, states that sometimes (Skolnik, 1984:3-4):

the lack of provision for transfer operates as a barrier for professional development in fields where basic career preparation is provided by the colleges but where a degree is required to advance. I know of an interesting case of this with respect to a particular occupation in the health professions. Most people in this profession are trained in universities, but there is one college which offers a program in this field, in which the training is to some degree integrated with a nearby university. A provincial evaluation of performance indicated that graduates of the college program performed as well or even better than graduates of the university program, particularly as rated by employers. Yet, graduates of the college program had a hard time obtaining and keeping employment and particularly, advancing to supervisory positions, largely as a result of intervention by the relevant professional association. In my view, from what I know of the situation, it is a deplorable example of credentialism at its worst and certainly underscores the need, indeed the moral obligation, for close co-ordination between college systems and university systems in insuring equitable and humane treatment of graduates.

The Ontario Federation of Students (OFS) (1984) argues that the mechanism that currently facilitates the transfer of credits between colleges and universities "is symptomatic of the failure of system-wide planning for all three components of Ontario postsecondary education: colleges, polytechnic education, and universities" (p. 1). It is OFS

(1984) contention as well as that of the Ontario Economic Council (1976) that lack of direct transfer between colleges and universities leads to the unequal representation of social and economic groups in all three components of postsecondary education. According to the Ontario Economic Council (1976:24):

While certainly not universally true, a higher proportion of community college students probably are from lower-income families than university students. The CAATs undoubtedly perform a more useful function in making it possible for many students to acquire knowledge and skills that will increase their earnings and employability.... It is unfortunate that such students, probably few in number but nevertheless high in potential, tend to be "locked in" to an earlier decision that was based on inadequate information.

In terms of transfer from universities to colleges, Norton points out that there are three pressures that this situation imposes in the institutions involved (Skolnik, 1984:5).

First, there is the pressure on admissions policies involving the question of whether university experience should count for or against applicants, or be neutral. Subsumed under this question is the related question of whether university experience can be concealed from people making admission decisions, especially when multiple criteria are used for admission. These questions, in turn, raise fundamental questions about the purpose of the colleges.... (Furthermore), having increasing numbers of students with university experience introduces pressures of credentialism with respect to hiring and evaluating college faculty. Third,...as the college student body becomes more diverse (having people with university experience being one of the aspects of this diversity), there is pressure on the colleges to mount new delivery systems, involving more individualized approaches to instruction, having people start their college programs at different places and proceed at different rates, and mixing different types of curriculum approaches.

How then should the issue of transfer be dealt with? Gregor (1979:38) suggests:

To some extent the situation can be nullified by having college programs compartmentalized, with the university-transfer stream kept quite separate from the technological programs, for example. But any attempt to maintain vigorously such a dichotomy is doomed to...failure.... If such transfers are on a small scale, as they are now, there are few consequences except to the individual student. If they increase in volume,...then a very real pressure would begin to be exerted on the college programs to bring them into closer symmetry with those of the university, in terms of both content and admission requirements. Then would appear again that vacuum the colleges were in fact intended to fill in the first place, and the

"homogenization of postsecondary institutions" that all the provinces attempted to avoid.

Public Access Policies and Practices

In an address to the Council of Ministers of Education Conference in Fall 1982, Hon. Bette Stephenson, Ontario Minister of Colleges and Universities, stated (Conference Proceedings, October, 1982:250):

In discussions on accessibility we have recognized that our efforts over the past 20 years to broaden postsecondary opportunities for Canadian youth, while highly successful, have nonetheless had some limitations.

While we have dramatically increased the number of students attending postsecondary institutions, access to postsecondary education remains far from equal across all social and economic groups in Canada in many areas, including minority official language groups. Accessibility can also be further improved for Native peoples, part-time students, the handicapped, women, and those who live a long distance from any postsecondary institution. Real equality of accessibility for these and other groups will take time, but I can assure you...that the commitment has been made and is being addressed.

Ontario has made some strides in terms of providing postsecondary education to students. In particular, we have shown that an increase in the number of postsecondary institutions in the 1960s was one important strategy for providing equal educational opportunity. Whereas participation rates have increased over the years (i.e. university participation from 1970-71 to 1982-83 grew by about 4%, Ontario Universities 1984, June 1984: p. 5; also Table 3.1), a fundamental question is "what students now enrol in our universities?"

Compared to other provinces, Ontario has the highest proportion (15.5% of the 18-24 age group in 1982-83) of its population participating in universities (Table 3.1). This relatively high participation is particularly noteworthy given that the government now spends less on postsecondary education than in the early 1970s (17.5% in 1980 compared to about 22% in 1970). In 1974-75, Ontario ranked seventh in terms of expenditure on each full-time university student; in 1981-82 it ranked tenth compared with other provinces. It is also interesting to note that over the five-year period from 1980-81 to 1984-85, tuition fees increased

about 34 to 58%, while between 1978-79 and 1982-83 average grants to students fell by 5%. In contrast, loans to students increased by 120%.

Therefore, while pointing out that participation has generally increased we need to look more closely at the social and cultural composition of universities and colleges. Quite appropriately, Hon. Bette Stephenson points out that ethnicity, geographic location and gender as well as physical handicap do influence access to postsecondary education. The Council of Ontario Universities contends that "the current debate on accessibility concentrates narrowly on the demand for graduates of secondary schools" consequently ignoring the "large issue of quality of access, which is not the same as demand for access" (COU, May, 1984). Therefore, is it important to assess how the government has responded to access demand over the years? What students gain access? How do they gain access? To what programs and institutions?

It is necessary, then, to examine public policies and practices as they pertain to higher education. Given the central role played by the government in defining the postsecondary system, an examination of commentaries and debates by policy-making bodies can provide insights regarding the development of and current practice of access in Ontario. In the following section, we will review attitudes and policies of the government, government commissions, and higher education groups. Finally, we will examine the role of postsecondary institutions in defining and implementing access policies.

The Government

"In Ontario we have dedicated ourselves to equality of opportunity. Education has been made available to the people by building more facilities in the various areas, and loans and grants have been provided to help finance costs." (Hon. Leslie Frost, Premier, February 4, 1959: Hansard:134S). This has been the stated policy of the Government of Ontario for over 25 years, and to ensure accessibility, Hon. Jim Allan, Minister of Universities, stated: "Our objective is to ensure that no student who has the capacity will be deprived of the opportunity of attending university and developing his talents to the fullest possible extent" (cited by Mr. Conway, October 24, 1983: Hansard, S-542).

One recent report provides this summary (Anisef et al., 1982:27):

The government position throughout the 1960s and into the 1970s has been one of attempting to ensure equality of opportunity through the expansion of facilities and the provision of financial aid to remove financial barriers to postsecondary education. The rapid expansion of Ontario universities in the 1960s and the creation of the system of colleges of applied arts and technology (CAATs) in the late 1960s and their expansion in the 1970s reflected the government's view that provision of such facilities was perhaps the major plank in policy regarding accessibility.

Critics of this approach view the government as being too passive in its support of equality of educational opportunity. Government is viewed as promoting policies that primarily provide access to students who have the "appropriate motivation" (Anisef et al., 1982:28).

To gain access to universities, the government held the view that the "admission standard should be moderate and reasonable such as to enable the average student to proceed to a degree...55 and 60%, dependent on the type of course should define what I mean by the average student" (John Roberts, 1963).³ However, it is significant to note that the government does not provide any guarantees⁴ in making access a reality to all students. In fact, (Ontario Council on University Affairs, Third Annual Report, 1977:7)

The active pursuit of Government of "accessibility for all qualified applicants" must be understood in the context of two specified points. First, what constitutes a "qualified" applicant has been left for each university to determine in the context of each of its programs. Second, it has always been understood that no applicant is entitled to a place in the program or institution of his choice. What is envisioned is that a qualified applicant will be able to find a place in some program at some institution in the province.

Although the government does not provide "guarantees" (Hon. Bette Stephenson, Hansard, October 24, 1983:S-542), can we say that it seeks to make accessibility a reality for all Ontario students? The response to this question has to be negative if we take seriously the statements of the various ministers (Hon. W. G. Davis, Premier, Toronto

³ Cited by Mr. Conway at the Standing Committee on Social Development, Hansard, Monday, October 24, 1983:S-542.

⁴ Hon. Bette Stephenson, Hansard, op. cit., October 24, 1983:S-542.

Sun, March 30, 1971) (Hon. Harry Parrott, Minister of Colleges and Universities, Hansard, May 29, 1978:S-698) responsible for implementing policies of accessibility:

...the problems of low-income students originate long before the postsecondary level - often as far back as Grade 2. Even if university tuition were free...many of these students would never go to university.

...we can't be all things to all people, much as we might like to be. We just can't evolve a system that will allow everyone to have equal opportunity. That's a great concept and I don't fight it in principle. But when you get down to the specifics of doing it, it's next to impossible.

Hon. Bette Stephenson summarizes the government's view on accessibility in her closing address at the conference of the Council of Ministers of Education (October 1982:250-251).

Paul Anisef and others have told us that it is not enough for us to provide a broad range of postsecondary institutions and programs, to have an open admission policy, and to have generous financial aid schemes. We need to go further to ensure full accessibility for all.... How can we, or more importantly, should we, influence the early socialization of students by parents, relatives and peers? Where does the responsibility of parents end, and where do the responsibilities of educators start? I worry about some of the recommendations we have heard which see the education system as the great equalizer of society and call for government and educational institutions to be directly involved in areas which have traditionally been the responsibility of the family.... As we all know, Canada enjoys a level of participation in postsecondary education that is one of the highest in the world. And although the data show that the mix of students in our postsecondary institutions has not radically changed over time, certain groups have made great strides.

In essence, Dr. Stephenson's questions on the role of parents, the expectations of government and the educational system, and the comments of her colleagues, suggest that the government sees the question of access more in terms of the provision of facilities and financial assistance while leaving the social and cultural barriers to be addressed by "the family" (Paul Axelrod, The Globe and Mail, February 8, 1984:7).

Today, the government finds itself with a policy on accessibility that it never supported unconditionally and which it no longer wants to pay for.... Now that universities are seen as part of our economic malaise by costing too much and appearing to produce too little, the policy has become an unaffordable luxury.

Government Commissions on Postsecondary Education

It is the commissions and committees set up by the government to examine and recommend changes necessary within the education system that provide insight into the mechanism and sources which the governments have used to inform their policies. Over the past 25 years, no less than four commissions and committees have been established; among them are the Commission on Postsecondary Education in Ontario (1972), the Committee on the Future Role of Universities in Ontario (1981) and currently The Commission of the Future Development of the Universities of Ontario (1984).

The commission on postsecondary education (the Wright Commission) was established in 1969 to investigate all aspects of postsecondary education and "to consider...the patterns necessary to ensure the further effective development of postsecondary education in the province during the period to 1980" (p. iii). The commission talked of the need for universal accessibility stating that: "When faced with the imperative need of education for survival, universal access should seem, not a benevolent dream, but a categorical necessity" (p. 33). Furthermore, according to the commission, for individuals to succeed they must have access to appropriate educational services throughout their lives and not just after high school, and education should be flexible enough to provide linkages to careers or employment opportunities, since the latter is an important aspect in the decision-making process of students. In addition, accessibility by design must counteract discrimination and regional disparities.

The committee on the future role of universities (the Fisher Committee) was mandated on November 28, 1980, among other things, "to develop a public statement of objectives for Ontario universities in the 1980s expressed in operational terms." In its report to the government in August 1981, it suggested that "accessibility to Ontario universities should be improved to meet the needs of those groups in our society which are not yet adequately served (and) more academic programs, including professional programs should be provided on a part-time basis" (pp. 11-12). The committee suggested that because of low participation rates, northern universities should have a policy of free tuition. The

committee further recommended that the number of universities and the range of each university's activity should be reduced (p. 43).

Ontario should have one comprehensive university capable of offering a very broad range of high-quality programs at all degree levels. The province would not have more than four full-service universities offering a more restricted range of high-quality programs at all degree levels. Also the province would have four or five special-purpose institutions, including some designed specially to serve Northern Ontario.

The committee's recommendations raise questions about accessibility. If universities become specialized, would not access be limited for some students who might have to travel away from home to attend university? The consequence would be additional costs to students, and thus a barrier to those students with less financial resources.

It is the changing conditions pertaining to enrolment, admission requirements and the debate on university specialization that prompted Hon. Bette Stephenson to announce the appointment (on December 15, 1983) of a three-person commission (commonly known as the Bovey Commission) to review the future role of Ontario's universities. Part of its terms of reference was "to address the issue of accessibility to university level education in the context of economic realities and the context of a differentiated university structure...", and to consider the appropriate role of "highly specialized, designated-purpose institutes," as well as "the designation of specific universities as centres of specialization...assuming that the resources to be made available to the new university structure will not differ substantially from that which would normally be allocated" (p. 3).

The Bovey Commission is the most recent body to review the status of postsecondary education in Ontario. Its findings and recommendations will evidently influence the kind of dialogue and eventual structuring of postsecondary education in the 1980s. Consequently, it is appropriate that we closely examine public reactions to the mandate of the commission and reactions to its subsequent report and recommendations. The following section examines these reactions.

Reactions of Higher Education Groups to the Bovey Commission

A Reactions to Its Mandate

Most higher education groups have reacted strongly against the commission's mandate to "clarify the meaning of accessibility in the context of economic realities and make recommendations on restructuring the university system." Sarah Shorten, President of the Canadian Association of University Teachers (CAUT), in a letter to the Hon. Bette Stephenson states: "It is hard to read this in any other way than as a statement of the Government of Ontario's intent to reduce access and to impose controls on registration from outside the universities" (CAUT, May 1984:15). The Ontario Confederation of University Faculty Associations (OCUFA, Research Letter, No. 8) in opposing the commission writes:

To better understand the minister's vision of accessibility of Ontario universities, we must first look at her use of the term "economy reality." Throughout her speech, the minister alludes to this reality as one which reflects the government's "policy of fiscal restraint," the government's "prudent management of public funds." All of these definitions of economic reality share a view of university financing as a cost item rather than an investment. The meaning of accessibility in the context of economic reality, then, is the number of students who can go to university for a predetermined sum of money, a sum determined by fiscal restraint and prudent management.

What is totally absent from such a position, aside from a view of university funding as investment rather than cost, is an appreciation of accessibility policy as social policy which should be widely debated.

The accessibility of the universities of Ontario is directly related to the contributions of higher education to the lessening of inequalities in Canadian society, to the improvement of the quality of life in Canadian society, and to the creation of economic wealth.

On the point of restructuring the university system OCUFA comments (OCUFA, Research Letter, No. 7):

Whether or not the restructuring of the system into a more differentiated and specialized one reduces the total number of programs and course offerings in the system as a whole, it is very likely that the pattern of study at each university will be significantly altered. Indeed, that is the intention of the restructuring. What

effect will this have on the less mobile groups of students? People who have other commitments, such as jobs and family responsibilities, that keep them more tied to a particular community, cannot go searching for the university that offers a part-time program in a particular area of study.

Therefore, it is just those groups that are now enjoying a more accessible system that will likely be hurt the most by the types of changes that Bette Stephenson is suggesting for the university system of Ontario.

These reactions by higher education groups are premised on the recent increase in university student participation rates particularly "those groups" whose involvement in university has been more recent. Specifically, (OCUFA, Research Letter, No. 7)

The number of part-time students has increased much more dramatically than full-time students, 67% compared with 31.7%. Also, female enrolments have increased much more dramatically than male enrolments, 80% compared with 18%.

The groups that have shown the largest increase are part-time female undergraduates and part-time female graduates, 104% and 155.2% respectively....

Nevertheless some groups such as "Native Canadians and persons from lower socio-economic groups are underrepresented in university enrolment" (Sarah Shorten, CAUT, May 1984:15). The Council of Ontario Universities (COU) notes that universities have always taken the stance that there should be accessibility to postsecondary education for all in our society who are able to benefit from it, provided that the institutions to which access is offered are adequately funded and that universities retain the power to determine admissions requirements. With universities at near capacity and under severe financial constraints, enrolments are, according to COU, being limited to maintain quality. This must consequently influence accessibility.

Dr. Ron Levesque, Associate Executive Secretary of CAUT, points out that part-time undergraduate enrolment rates and enrolment rates for women have increased dramatically in the '70s, creating a further structural change in participation. He maintains that if universities cut back on enrolment and create more competition for university places, children from lower income families (and other non-traditional student groups) will suffer the most. Middle- and upper-income parents will buy their children "the extra frills" such as private tutoring that will give

them a competitive edge when they apply for acceptance to university (CAUT, December, 1983:6).

Richard Bellair and Helen Baxter, also from CAUT, concur that the shape of accessibility is changing and altering in a negative direction. Thus, the physical ability to accommodate postsecondary students is at a standstill (CAUT, October, 1983:8). They feel this development is welcomed by some in universities and government in that it signals a return to the 1940s and 1950s when Canadian universities were small and elite. Both women and lower-income Canadians will be among the first to lose out should our universal accessibility policy significantly change (CAUT, October, 1983:8).

Still, it is possible, indeed necessary to debate the question of who should go to university, how many should go, as well as the kind of graduates the country needs to maintain a healthy economy.... Instead, provincial governments are trying to shift policy without any public debate and in such a way that certain sectors of the population will be harder hit than others.

In a 1981 policy statement on student aid and student access, OCUFA cites a number of studies that document significant differences in university participation rates by socio-economic status, urban origins, ethnicity, language group and other minority groups (handicapped, part-time students). They state (OCUFA, Nov. 1981:4):

Many societal and economic factors contribute to the under-representation of certain groups in Ontario's universities. In most cases, the decision to attend or not to attend university is made long before application forms are distributed to Grade 13 students. High school "streaming" decisions are made in Grade nine. Parental expectations and other environmental factors operate from birth. Thus, if it is desirable to promote fairer, or more representative, access to universities, plans must be designed to be effective in the long as well as the short run.

B Reactions to the Bovey Commission Report and Recommendations

Eleven months after it was set up the Bovey Commission completed its mandate and on December 12, 1984 reported its findings to the Minister of Colleges and Universities. In its report, Ontario Universities: Options and Futures, the commission recommends that admission to universities direct from secondary schools be based on a combination of teachers'

marks and school reports and of province-wide admissions examinations assessing achievement in at least language (English or French) and mathematics, but that "alternative arrangements for admission of mature students be continued" (p. 37) moreover, and that "a larger proportion of total educational costs...be covered by tuition fees in recognition of the added personal benefits designed to ensure that this does not increase the financial barriers to accessibility" (p. 39). In order to guarantee that this increase in tuition fees does not become a financial barrier to accessibility, the commission further recommends that "fee increases be accompanied by increased student support" provided by an "income contingent repayment loan plan" where "repayments are geared to an ability to pay so that unlike a fixed repayment loan they do not impose a burden on earnings when the graduate is least able to pay" (p. 53). Also, given the demands being made on university facilities, the commission recommends that universities be allowed to reduce enrolments without financial penalty. This reduction would range from 4-8% and relates to the extent to which institutions engage in resource-intensive research (eg. engineering, medicine). Thus, universities in which federal research council grants exceed 15% of operating income would be allowed a maximum "corridor of insensitivity to enrolment changes."

The commission also recommends that the Ontario government maintain its long-standing policy of accessibility, namely that "no student who has the requisite capacity be deprived of the opportunity to find a place in some program of study in some university in Ontario..." (p. 37).

The commission further recommends that "...steps be taken to improve accessibility by meeting more adequately the needs of the following groups: (1) the increasing number of students over 25 years; (2) women, particularly in those fields where their participation rate remains significantly below that of men; (3) Franco-Ontarians,...[by] "offering more professional programs in the French language..." or making "appropriate arrangements for Franco-Ontarians to pursue these programs in the French language universities elsewhere in Canada; (4) those living in remote areas such as Northern Ontario; (5) Native people; (6) people from socially and economically disadvantaged backgrounds; (7) the handicapped"

(p. 37). In terms of part-time students affected by regional disparities the commission recommends that in funding programs, government should give consideration "to the regional dimension of accessibility, particularly in relation to the demand for part-time and continuing education. Such consideration is of special importance in the case of women students, because of their general lack of geographical mobility" (p. 37).

In the judgment of the commission, "the maintenance and strengthening of a well-functioning, high quality and broadly accessible university system" should "be given a high provincial and national priority as a critical element in restoring growth and competitive vigor to the economy and society" (p. 36). Yet as we have noted it recommends that admissions to universities be based on 50% province-wide examination and 50% "teacher's marks and school reports concerning motivation and relevant extra-curricular activities" (p. 9). At the same time the commission also recommends an increase in student fees; and a reduction in enrolment by 4-8%.

Should these recommendations be implemented, one of the possible consequences would be a reduction in access, particularly for the socially and economically disadvantaged, or the very persons for whom, according to the commission, "additional resources can be made available" since "there remains room for improvement of accessibility" (p. 9).

Furthermore, the commission acknowledged that the dissolution of Grade 13 will affect the demands on universities as of 1989 (p. 8).

In particular, the system must be ready to cope with the impact of the "double cohort," which arises from the compression of the minimum five-year secondary school graduation requirement into four, and which will result in a surge of enrolment in the period 1989-90 to 1992-93, with a peak in 1990-91 of total enrolment, some 8% above that in 1983-84.

It is therefore logical to assume that the cumulative effect of a cutback in enrolments, a surge in enrolment produced by the double-cohort and an increase in student tuition fees will have a sharp negative impact on general accessibility.

The reactions to the commission's report, released January 15, 1985, have been extended, diverse. There are those who praise the

commissioners for preserving the autonomy of universities for not recommending that universities be radically restructured (Jones, 1985), and for seeking to preserve quality education.

In contrast, there are those who are critical, particularly on recommendations relating to access. Peter Newman, for example, writes that the commission's aim "is not to raise money but to raise consciousness in a spirited debate on costs and values essential to preserving the quality of Canadian society" (1985:39). Bill Jones of OCUFA, in his analysis of the Bovey report, points out that the commission's recommendation that enrolment be reduced is completely contrary to their "own recognition that Canada, from the point of view of economic competitiveness, needs to increase the proportion of its people who are highly educated" (p. 6). Therefore, "it is difficult to imagine a minister arguing...for the same or increased levels of funding for a university system that accepted fewer students." Already these proposals have been criticized by the former premier of Ontario, Bill Davis; and the minister herself questions the feasibility of implementing such a proposal (Jones, 1985:7). The commission does not argue that 25% increase in tuition fees is a fair amount for students to bear; however, it opposes fee increases if they would lower an individual's chances of attending university for financial reasons. While it is possible that the increase in tuition fees over a short period could affect university enrolment, there is no evidence to show this is really the case. Nevertheless (Jones, OCUFA, 1985:8),

It is worth asking whether or not a high debt load might in itself be a real barrier to university enrolment for people who are economically disadvantaged. Moreover, the scheme would not change a person's debt load according to income; it would simply adjust repayments.... The plan is not therefore as convincing from the point of view of fairness as it may at first seem.

Richard Balnis, co-author of an analysis of the Bovey Commission report and a researcher for the Ontario Federation of Students (OFS) suggests that the report's recommendation, are designed to reduce demand for higher education by making it "an impossible dream for the children of lower-income families" (Toronto Star, February 2, 1985:A9). Balnis asserts that "the decision of whether to go to university is basically

made in Grade 8. A lot of parents who perhaps are unemployed or carrying a heavy mortgage are going to look at the higher tuition and say, "I'm sorry, you can't go!" (Toronto Star, February 2, 1985:A9). OFS also contends that the Bovey recommendations concerning student tuition fee hikes are formulated in such a way that students will blame their university rather than the government for higher fees. One Toronto newspaper in its editorial (Toronto Star, January 19) claims that:

The choice facing Ontario's university system couldn't be clearer, and the Bovey Commission has put it in sharp focus: either Queen's Park and Ottawa provide the cash our institutions need, or students will have to shoulder the burden as access is reduced and fees are increased.

...Reducing access to higher education is not only socially cruel, it is economically short-sighted. It would also be a disproportionate burden on the young people of this province....

This double burden would make a mockery of the Davis government's longstanding and highly principled commitment that no qualified student will be deprived of a place in our university system. And the first victim of these changes would be the most economically vulnerable....

It's easy enough to say, as the Bovey report does, that the government should enrich its student loan program to cover the extra cost of tuition. But...asking those students to shoulder a \$6,400 debt in tuition fees for a four-year degree instead of the current \$4,400 debt - at the very time when summer jobs are scarce and there's no certainty of full-time employment on graduation - isn't calculated to lure them back to school, even if the student loan program were tailored to ability to pay back....

...Every dollar spent by the taxpayer on higher education comes back in tangible benefit to the community. Since in today's society postsecondary education is every bit as important as high school was 30 years ago, what is the logic of society's providing one free but asking students to shell out increasingly more for the other?

Accessibility: The Role of Postsecondary Institutions

As pointed out earlier, the government developed a policy that enabled any Grade 13 student with an average of 60% to gain entry to a university undergraduate program. Yet, the "policy has never been clearly defined in operational terms, but has been anything but an empty slogan" (COU, May 1984). This made it possible for some universities to raise their admission requirements from 60 to 70% in 1983. Commenting on this change, Ian MacDonald, York University president at that time, stated that his "university has grown by about one-third in the last few years, the resulting enrolment increase taxed the physical capacity of

the university to the extent that it was felt that no more students could be accommodated and the quality of education could be maintained only if class sizes were curtailed" (Excalibur, February 1984:4).

Other universities have similarly curtailed entry. One consequence of this action was articulated by Lino Magagna, a member of York University's board of governors where some 1,400 Grade 13 students with marks of 60% or higher were refused entry. She stated "new Canadians who are more likely to have marks between 60 and 65%" will be hurt most by this new policy. "By forcing universities to tighten standards you exclude a disproportionate number of immigrant children, yet many of these children blossom in university, if only given a chance" (Toronto Star, August 27, 1984:A8). The situation promises to be more desperate in 1984-85. Already university spokespersons have said that only those students with average grades of at least 75 - 80%, and who met the necessary requirements before the summer, are likely to gain entry.

This situation, in large part, seems to apply to more urban areas and the more prestigious universities. Thus, there is still the possibility of students gaining entry to other universities in the province. This will, however, entail relocation and travel costs. For some students, these additional costs may lead to their deciding not to enrol.

The same enrolment demands are also being made of community colleges. This places strain on the lottery system now used to select students from the qualified applicants who seek entry into limited enrolment courses. Defending this system, Dr. Stephenson claimed "the lottery system is used by some colleges as a fair way of choosing when there are many equally qualified students applying" (Globe and Mail, April 14, 1984:11). Critics of the lottery system contend that though this system might appear to offer an equal chance to all applicants, "it may not be equitable to the extent that no two applicants are ever identical in all respects.... It does not by itself enhance accessibility" (Stager, 1984:19). In its 1983 report, the OECD pointed out that there is a major disadvantage to the lottery system (Stager, 1984:19).

Even among those who openly recognize the arbitrary element in most selection procedures, there are many who reject the idea of a lottery, considering it to be proof of failure and consequently detrimental to the internal ethos and external image of high education institutions.

For the average Grade 12 graduate, gaining entry into college is difficult when we take into consideration that he or she must compete against university dropouts, adults and Grade 13 students. While it is true that most students admitted to community colleges are general level graduates, a recent Ontario Secondary School Teacher's Federation study of "Who goes to college?" found that only a third of the students who took mainly general level courses (usually starting at Grade 9) proceed to college directly from secondary school. The figure was lower for those students who began secondary school taking mainly general level courses and higher for those who began school taking mainly advanced level courses and who changed to general level.... Approximately 45% of students who enter college postsecondary programs took mainly general level courses in their last year of secondary school (just over 20% were Grade 12 advanced level graduates)" (King 1983: 19). One Ontario legislative education critic (Mr. Allen, May 1, 1984, Hansard), in referring to these findings, comments:

It makes it quite plain that only 28% of general level Grade 9 students get to college, and the probability of a Grade 9 general level student completing any college program is one in 25. When they get to college they find themselves competing in the same classes as students from advanced level Grade 12, Grade 13 and university dropouts, because these students have not been given any advanced access or any advanced standing.

Essentially, then, the policies of admission to postsecondary institutions seem to be more of a "social policy, not an educational one, it has been primarily demand-driven. The objective has been to provide sufficient places to meet the growing student demand..." (COU, May 1984). This also raises questions concerning the purpose(s) of grades. Tom Norton, Vice President (Academic) Humber College notes that:

If our purpose is to have people get through the programs successfully, then the reliance on marks is justified. If our purpose is to turn out people who perform well in the field for which they are being trained, and who have successful, fulfilling lives, then the reliance on marks, especially the exclusive reliance on marks, is of dubious merit.

That grading standards vary among teachers and among schools is fact and therefore an important area of concern. This has led to proposals

for restoring province-wide high school examinations, common curriculum and university entrance examinations.

Studies (Porter et al., 1979; Anisef et al., 1980) have shown that there is a direct relationship between socio-economic status and academic achievement. If, therefore, grades are used as the decisive measure of academic qualification, they may act as an additional barrier to access for economically disadvantaged and ethnic minority students. Moreover, common curriculum and province-wide examinations may prove insensitive to economic and regional disparities and differences. For example, province-wide examinations may favor urban educated students while reducing the likelihood of university acceptance for rural students.

In an article entitled: "University Graduates Revisited: Occupational Mobility, Attainments and Accessibility," Anisef (1982) points out that "universities cannot be treated as unidimensional entities or as a single 'black box,'" for in a way "they are stratified in terms of both status dimensions and regional dimensions" (p. 18). It is important to note, then, that accessibility itself varies by university and this is reflected in the significant differences in recruitment patterns across universities in Ontario.

The Council of Ontario Universities (COU) illustrates that in fall 1983, the grade point average of Grade 13 students entering universities was between 65 and 86. The grade point averages varied by program. When program is held constant, however, the more urbanized, older universities generally recruit students with higher grade point averages. Table 4.1 further shows that Ontario Scholars are more likely to attend these older universities. Specifically, the table shows the University of Toronto (25.7%), Waterloo (16.7%), Western (15.1%) and Queen's (11.0%) attract greater proportions of all Ontario Scholars than most of the other universities.

The recently released Bovey Commission report recommends that research - intensive universities (e.g. Guelph, University of Toronto, Queen's will, without financial penalty, be able to reduce enrolments by 8% while other universities like York, reduce their enrolment by 4%. This means higher admission standards may prevail at the more research - intensive universities, exacerbating student selection differences among

universities and further stratifying universities in Ontario. As a result, a prestige hierarchy among universities would clearly emerge and call into question the extent to which all universities are accessible to all qualified students.

Who Goes to University and College in Ontario

Introduction: A Description of Studies

As pointed out earlier, a closer examination of the participation pattern and characteristics of postsecondary students in the province provides some insights into what seems to be the predominant barriers to access. Using the social stratification model, sociologists have reported that socio-economic status, gender, ethnicity and region help, in varying ways, to understand full- and part-time student participation, type of institution selected and level of study.

Some of the major Ontario studies (Clark et al., 1969; Anisef et al., 1980; Porter et al., 1979) which have examined accessibility to higher education, have focussed on students' postsecondary aspirations while in secondary school. While this information does not directly predict actual postsecondary participation rates, it is an appropriate indicator of the students' expected activities after high school and thus their perception of access to a postsecondary education. Reference will therefore be made to these and other similar studies in our discussion. Studies that focus specifically on postsecondary participation include Is the Die Cast? (Anisef et al., 1980), Losers and Winners (Anisef et al., 1982) and Application of 1981 Statistics to Postsecondary Education (Anisef, 1984).

Anisef and Okihiro (1982) developed a strategy for monitoring accessibility trends in Ontario postsecondary education with respect to several socio-economic factors including mother tongue and parental levels of formal education. The strategy (subsequently adopted by the Alberta Department of Advanced Education and Manpower in its 1984 Participation Patterns Study) relies on the federal census as a data source and involves relating socio-economic information concerning the male or female head of the household and the level of formal education attained by children permanently residing in that household. Losers and Winners reports accessibility trends based on special tabulations derived

from the 1971 and 1976 censuses. Anisef (1984) updated these trends to 1981; they are illustrated in Figures 4.1 through 4.4. It should be noted that many of the methodological problems associated with analyzing census data for Alberta (these problems are described in the Alberta section) apply as well to the province of Ontario. In 1971 and 1976 the proportion of 18-21-year-olds living at home was approximately 65%; this increased to 72% in 1981. Direct inferences to the postsecondary experiences of all 18-21-year-olds, especially changes in such experiences from 1971 to 1981, are thus limited by the peculiarities of the (census) data bases. Critics contend that the study "makes a contribution to the study of access to postsecondary education in that it illustrates how census data may be used to assess, at least to some extent, changes in such patterns over time" (Harvey and Blakely, 1982:i), nevertheless the extent to which generalizations may be made is limited by the nature of census data (Pike, 1983; Harvey and Blakely, 1982).

It is also important to place the literature discussion on the attainment of women and ethnic minority groups in perspective. With regard to women, Aylward (1983:3) comments on Losers and Winners:

They begin by documenting the inequalities in the educational system, and then attempt to account for the different levels of attainment of females compared to males, and to explain the failure of women to achieve equality with men in the labor market. While drawing critical attention to social inequalities, this tradition is limited in two important points. First, primarily concerned with accessibility to education, there is no analysis of the role of the educational system in the creation of a gender-segregated labor force. Second, such studies operate within a descriptive sociological framework of ideas about stratification, and often obscure the process involved.

Essentially, studies that have used the social stratification model account for unequal educational outcomes in terms of students' academic abilities and socio-cultural characteristics (e.g. SES, gender).

Such analyses are said to obscure the disadvantaged position of women (Aylward, 1983) and ethnic minority groups. Some researchers point out that sex and cultural background are not as essential in determining access to university as class. Bob Pike captures the complete interrelationship of these factors when he writes (1970:35):

In the essential category, there are four factors: possession of adequate ability to meet the demands of university or college work;

possession of a high-school certificate or diploma; sufficient money to meet college expenses; and, finally, the student's own desire for a college education. In the related, but non-essential category are the factors of sex, cultural background, geographic location, and ethnic and religious background. Without the possession of the 'essentials' a young person would not be able to attend university or college, or might not want to attend. But, in an indirect way, his social, cultural, and ethnic background plays an important part in determining whether he possesses the essentials or not.

Socio-economic Status

Statistics show that students who have a professional parent or high income earners as parents are vastly over-represented in universities, especially in professional schools, and students who have parents with low incomes are over-represented as a percentage of part-time students and community college students.

Mr. Cooke, Hansard, May 2, 1978:644

Nevertheless, it is the government's view that participation in postsecondary education is not exclusively influenced by income level of parents (Hon. Rette Stephenson, Hansard, May 21, 1980:S-431). Research shows, however, that students' educational aspirations are largely a product of their socio-economic background (Buttrick, 1977; Crysdale, 1975; Clark et al., 1969; Gilbert and McRobert, 1977; Porter, Porter and Blishen, 1979).

In 1961, the Canadian Union of Students, in a report of a national survey of students at university, found that in Ontario half of the students were from the 15% of families who reported the highest income levels (Hatton, 1983:41). More recent studies carried out by Carleton University Students' Association (1976 and 1979); University of Western Ontario Student Council (1976 and 1979); University of Waterloo Student Federation (1980) and McMaster University Student Union (1982) show that little has changed. These studies show that students tend to come more from upper-income families (OFS, May 1981:15-29; Hatton, 1983). Specifically, the Waterloo (1980) study found that 31.3% of their respondents, the largest group, reported family incomes of over \$30,000 (OFS, May, 1981:17). Similarly, the McMaster (1983) study found that 63.7% of their respondents reported family incomes over \$30,000 and nearly 41% reported family incomes over \$40,000. In interpreting the McMaster results, it was noted that "in describing their families objectively, 85.3% stated

that their family income was adequate, comfortable or affluent, and 66.1% stated that their families were comfortable or affluent; 9.3% considered that their families were in some financial difficulty..." (Halton, 1983:41). Anisef et al. (1980) found that, compared with almost half of university enrollees, only two in 10 community college enrollees were from the highest socio-economic levels. In fact, while university enrollees were drawn heavily from the higher SES levels, community college enrollees were spread fairly evenly across the class structure.

Von Zur-Muehlen (1978) in a national study that documented the extent to which social-class differences, as measured by parents' educational attainment, affect their children's participation in postsecondary education, reported that family socio-economic status was a significant factor in explaining participation rates. Though access to postsecondary education had remained or increased in favor of students whose parents have also attended university, the participation rate of disadvantaged students had also increased.

Anisef (1984) showed that in 1971, 1976 and 1981 parental education had a strong effect on sons' and daughters' university attainment probability (figures 4.1 and 4.2). During the same time interval, the percentage of 18-21-year-old sons at home with at least some university decreased in all parental education categories. This finding applied to daughters too except in the 'elementary - no schooling' parental education category where there was a modest increase of 0.48%. With respect to sons, overrepresentativeness increased from 1971 to 1981 in the highest category of parental education while underrepresentativeness increased in the lowest category.⁵ No change for daughters was observable in the highest category of parental education; however, an increase in representativeness occurred in the lowest category of parental education.

⁵ Ratios of representativeness were employed in Losers and Winners to evaluate the extent to which a particular social/cultural group was over- or underrepresented in university of PSNU. A figure of 1 indicates representation equal to the proportion in the population. A figure greater than 1 indicates overrepresentation; a figure less than 1,

Postsecondary non-university (PSNU) institutions continue to recruit students fairly evenly across a broad spectrum of parental education. For example, in 1981 ratios of representativeness ranged from 0.51 to 1.23 (sons and daughters) for PSNU students. In the same year, ratios of representativeness for university students ranged from 0.38 to 2.63.

The relatively elite composition of Ontario universities, especially at the graduate level, was clearly revealed in a recent analysis of the 1982 Ontario Graduate Survey, sponsored by the Ministry of Education/Ministry of Colleges and Universities. Table 4.2 shows a significantly greater proportion of graduate/professional than undergraduate degree holders come from families where parents have higher levels of education. For example, 50.2% of graduate/professional and 40% of undergraduate degree holders have either mothers and/or fathers with at least some university education.

Gender

In 1975, Gail McIntyre in Women and Ontario Universities (p. 3) reported that although women applicants were accepted at a rate equal to or higher than their rate of application in terms of participation:

Two out of five undergraduate students are women. One in four graduate students is a woman. For every discipline dominated by women, three are dominated by men. In short, fewer women than men are entering university, few still are continuing on to graduate school and at both levels women are found in a limited number of what might be considered "traditional fields." The most recent information available suggests that the percentage of women studying at all levels is on the rise, and in some disciplines, significantly. But, in general terms, the enrolment profile parallels the overall pattern of women's participation in the work force.

That women and men participate in postsecondary education at significantly different rates is in part explained by the relative difference in aspirations. Porter, Porter and Blishen in Stations and Callings (1982) reported that among Grade 12 students, more boys than girls expected to attend university. However, when socio-economic status was taken into

underrepresentation.

consideration, there was little difference in the aspiration of students at the higher socio-economic level while at the lower level 30% of males and only 18% of females expected to attend university.

In a follow-up study of Grade 12 students, the researchers found that gender and type of program selected were strongly correlated for college and university students, indicating a kind of internal tracking based on sex. Women fared more poorly than men in terms of enrolment in postsecondary education and enrolment in professionally-oriented courses within postsecondary institutions (Anisef et al., 1980; Turritin et al., 1983).

Table 3.6 shows that the gap between male and female university enrolments (aged 15-24 years) has narrowed in Ontario, particularly at the undergraduate level. Also, while university enrolment gaps between men and women (as a percentage of the 18-24-year-old population) was 6.6% in 1961, the percentage in 1982 was only 2.6. From 1977 to 1979 both male and female participation rates in university decreased slightly. From 1980 participation rates increased for both sexes (Ontario Universities 1984, June 1984:11).

Statistics Canada data indicate that between 1976 to 1981, the number of women graduates and undergraduates in both full and part-time study also increased. Full-time undergraduate participation rose from 44.1% to 45.6%, and full-time graduates rose from 30.7% to 37.7%. In the area of part-time studies, women's undergraduate participation exceeded that of men's 59.2% in 1976-77 and 60% in 1980-81. In fact, the percentage of part-time graduates rose significantly from 30.4% to 37.5% (Aylward, 1983:26). In the 18-24 age group, since 1976 the gap between male and female participation has narrowed substantially; in 1982 there was little difference in university participation.

A closer examination of differences in participation reveals that the majority of women (45.7%) are generally concentrated at the undergraduate level in universities. At the graduate level, although female participation has increased since 1970 (Table 3.6); proportionally fewer women (36.1%) are in graduate programs. Consequently, more men than women attain master's degrees and the gender gap increases substantially at the doctoral level (McIntyre, 1975).

Gender differences are revealed when study areas are examined. In 1975, McIntyre reported that women were "well represented" in "the fields of education, humanities and fine arts, the latter being the only field where women are in the majority. Women comprise only one quarter of the enrolment in the social sciences, and in the science-related fields, they represent a distinct minority" (p. 12). In 1983, Aylward writes (p. 27):

The majority of full-time female students were concentrated in areas dominated by women. Over 75% of women in postsecondary education were clustered in the social science, humanities, arts and health and education fields.... More women are, however, entering the traditionally-defined male subject areas. In 1976, the engineering field, for example, composed 7.8% of female undergraduates which increased to 10.7% in 1981.

Furthermore, Anisef in an analysis of a recent employment survey of 1982 Ontario university graduates found that more men graduated in the fields of commerce and business administration, engineering and applied sciences while proportionately more women graduated in the fields of education, physical education, recreation and leisure, fine and applied arts, humanities, social sciences and health professions and occupations.

Table 3.5 shows that at the college level, women and men are enrolled in career programs which indicates a gender difference similar to that at the university level. Furthermore, King (1983:16) in a study of six community colleges found that

The graduation rates were generally higher for females, although the Grade 12 General and Advanced level males were more likely to graduate in three-year programs. Interestingly, while there were more females than males enrolled overall, substantially more males than females were enrolled in three-year programs.

Geographical Location

Community colleges are located in both rural and urban communities. Therefore, our discussion will focus on the degree to which geographical location influences university participation.

Ontario's 16 universities are located in 12 of the major cities in the province. Three are located in Eastern Ontario, two in the south-western region, two in Northwestern Ontario, and nine in the central region of the province, three of which, including Ryerson Polytechnical Institute, are within the greater metropolitan area of Toronto. Clarke

et al. (1969), in an early major accessibility study, found that more urbanized area high school students were more likely to desire and expect a university education. Although university aspirations increased for both groups of students in Grade 12 there was still an 11% difference in favor of urban area students. Later, Porter et al. (1979) reported similar results. Specifically, 42% of Grade 12 students from metropolitan areas aspired to enrol in university, compared with 27% from rural areas. Comparable differences of a lesser magnitude characterized students of grades 8 and 10.

According to Anisef et al. (1980) approximately 67% of young persons who lived in rural areas and smaller urban centres expected to leave home to enroll in a postsecondary institution. The lower SES characteristics of rural areas, and their distance from postsecondary institutions posed a double hardship to students seeking access to higher education. In general, findings showed that the proportion of young people with postsecondary education experience varied strongly within the province: 74% in Toronto, 67% in other large and small cities, and 52% in towns and smaller rural areas.

In recent years, "distance education" programs have been developed to meet the access needs of students living in remote regions of the province (COU, June 1984).

The oldest and most widespread form of distance education is correspondence, such as the courses begun by Queen's University nearly a century ago. Originally sought out largely by elementary school teachers hoping to acquire university degrees and thereby advancement in their profession, correspondence courses have for some years appealed to a much more diverse constituency. Certain courses have been designed for university degree credit, as the recognized equivalents of classroom courses in the same subject matter. Other courses are offered not for degree credit, but for professional or quasiprofessional certification, or for updating.

In Ontario, universities such as Carleton and Wilfrid Laurier offer courses using television; the universities of Western Ontario and Ottawa take a multimedia approach; the University of Guelph is introducing a university-level distance education program and Laurentian expects to expand its Northern Ontario educational program to permit degree completion in this mode. In essence, university education is being made available through television, radio and/or other networks. This takes

the form of video and audio programs and related materials. The Ontario Education Communications Authority (TVOntario) operates a television channel that reaches all areas of the province (Smith, Daniel and Snowden, 1984:78).

A recent review of distance education in Ontario universities by Smith and Snowden (1983) reported that some 16,000 Ontarians are served through the university credit programs offered through distance education techniques, and it is expected that the program will reach an additional 25,000 to 30,000 residents in the near future. Findings showed that the majority of persons enrolled in these programs were women, 25 - 44 years old, most of whom already had some postsecondary education. The programs of study are mainly offered by Laurentian University, the University of Waterloo, Wilfrid Laurier University and the University of Guelph. Stating that "the current decentralized institution approach can be expanded and extended," the report recommends that "a consortia of universities be established" (p. 6). It notes that "a co-ordinated approach to meeting the potential demand for distance education offerings" could prove to be more effective and efficient (p. 6).

Ethnicity

As shown earlier, the unequal postsecondary participation rates of different ethnic groups has not gone unnoticed. Hon. Bette Stephenson expressed her regret that while overall participation rates have increased, some ethnic groups, particularly Native Indians, still participate minimally in the system. While policymakers express a willingness to address unequal access of some ethnic minority groups, Burke (1984) has pointed out that "there are usually no special barriers to initial entry to elementary school, (but) subsequent entry to secondary and postsecondary institutions poses problems for cultural minorities" (p. 8).

Studies have shown that educational participation rates and achievement vary among ethnic groups. For example, Calliste (1982) reported that although Southern European and West Indian students were characterized by low socio-economic status, they were more likely to have high self-concept of ability and high educational expectations. They were

"more highly motivated, more achievement oriented and more likely to be upwardly mobile than working Anglo-Canadians" (p. 15). King (1968) found that Yiddish-speaking students had much higher retention rates than Dutch-, English-, Hungarian-, and Polish-speaking students, while the retention rate for French-speaking students was substantially lower. Curtis and Scott (1979:245) explain that the lower level of education attainment of francophones was related closely to the perceived threat of public school to themselves and their culture. In fact, no other ethnic group in Ontario finds itself in a situation as conflicting as French-Canadians. As Guy Rocher puts it: "the public school is in open contradiction with both their national identity and their fundamental values" (Curtis and Scott, 1979:245).

National studies have also shown that in general French students were less likely than English students to aspire to postsecondary education (Johnstone, 1969). However, Porter et al. found that among Ontario students, parental level of aspirations was essentially similar for both francophones and anglophones: 53% of the former and 48% of the latter wanted their children to go on to university. But, 39% of francophones and 49% of anglophone mothers actually expected their children to pursue a university education. At the same time, proportionately more anglophone parents (36%) than francophone (26%) had made plans toward financing their children's higher education.

Anisef (1984) found that from 1971 to 1981 many non-English speaking mother-tongue groups (e.g. Italians, Polish, Ukrainians) had substantially increased their full- and part-time postsecondary participation rates. Female minority group members were found to have generally increased their university representation disproportionately more than males. It should be noted, however, that Native Indian males lost ground from 1971 to 1981 in terms of their participation in university (figures 4.3 and 4.4). However, by 1981, most non-English speaking mother-tongue groups (male and female) surpassed the English-speaking mother-tongue group in their participation at the PSNU level of education.

A recent study of the student population at McMaster University revealed that apart from the 54% of the English Canadian representation there, the majority of the other ethnic groups are fairly equally

represented relative to their population in the province. Exceptions, however, were French Canadians: only 2.7% compared with 8.4% in the population. This low representation may be explained by the fact that many attend francophone universities. German/Austrian students (3.4% of 4.8%) and Netherlandic students (1.3% of 2.47%) are also underrepresented. Even though the percentage of Afro/Caribbean students equals that of the percentage among the Ontario population, 12.5% of this group were visa students. The most underrepresented were Native Indians. Although there were more than 15,000 Native Indians living in the area, none was identified in the sample. Later it was discovered that eight Native Indian students attended that university (Hatton, 1983).

The University of Toronto (since 1970) runs a Transitional Year Program (TYP), the objective being to assist ethnic minority groups and economically disadvantaged students to gain access to undergraduate programs within the University of Toronto. The program provides upgrading to students who lack university entrance requirements but have the "academic potential and are well motivated." Fifty students are admitted each fall and in the early years a very high percentage of admittees were minority group students. Today about 50% are ethnic minority group students. About half of these students continue on to an undergraduate program, and several subsequently enrol in graduate schools. However, transfer from this program to courses such as engineering is extremely minimal.

Part-Time University Students

Part-time students face additional and sometimes more difficult barriers than full-time students in their bid to acquire postsecondary education. This section discusses the unique barriers encountered by part-time university students.

In 1983-84 part-time undergraduate enrolment at university was more than one and one-half that of full-time enrolment, while at the graduate level, enrolment was almost identical for both groups. From 1973-74 to 1982-83, part-time graduate enrolment at universities was relatively higher than full-time graduate enrolment. In fact, within the last decade, undergraduate and graduate full-time enrolments at university increased by 28% and 16% respectively, while part-time undergraduate and

graduate enrolment increased by 57% and 6% respectively (Ontario Universities 1984, June 1984:5; Table 3.3).

The expansion of universities and colleges during the 1960s and early 1970s also meant an increase in educational opportunities for part-time students. At some universities, separate colleges cater exclusively to part-time undergraduate students, thus addressing their special needs. The "mature student clause," an admission provision is commonly used by universities to admit non-Grade 13 graduates aged 21 years and older. However, according to Stager (1984): "The issue now in the 1980s with respect to accessibility for part-time students is whether there will be a reduction in course offerings during the evenings and summers as a consequence of the general financial squeeze on universities" (p. 27).

Part-time students experience problems in terms of accessing programs, particularly professional programs such as law and medicine. In some cases, an inability to access courses, both graduate and undergraduate, become major limitations. Humphreys and Porter (1978:129) report that for one university

Once individuals enrol in a program of part-time university studies,...access to programs, courses and facilities within the university is limited. These limitations...(are) residency requirements, time scheduling, course rotation and hours of operation of facilities and services. The consequence is that part-time students are able to participate to a much lesser extent than full-time students in directing their educational experience.

In a survey of 4,000 part-time students, proportionately representing program enrolment in universities across the province, it was found that the average part-time student was one "with a long-time commitment and dedication to education" (The Levy-Coughlin Partnership, Inc. (L-CP), 1981:74). The picture of part-time students that emerged was: they were between the ages of 31-40 years (35%), primarily women (56%), married (60%); usually with some university education or an ordinary BA/BSc (45%); employed (71%) and having a personal income of less than \$15,000 (53%). Their occupations are mostly teaching (26%) and clerical work (12%) (L-CP, 1981:73). Excluding housewives (7%), the majority of part-time students tend to be those of social origins that traditionally encounter more barriers in gaining access to a higher education. Given

the fiscal restraints of the 1980s, it is feared that this group of students, who see a university education as important for career development (and subsequent social mobility), may find it even more difficult to enrol in the years to come (tables 3.8 and 3.9).

Stager (1984) points out that it is necessary to distinguish between students who are employed full-time and have only attended school part-time, and those who were once full-time students but now elect to attend part-time. A larger proportion of part-time students tend to be those who were previously full-time university students. Stager claims: "While they have a legitimate claim on postsecondary policy and resources, they represent a less complex set of considerations that impinge on the design of programs and admission than persons who choose to enter part-time study because they cannot afford to leave full-time employment" (p. 26).

Apart from summer, evening and correspondence courses which cater to part-time students, additional forms of distance education were instituted in the late 1970s to improve their educational opportunities. It was seen as an alternative means of reaching part-time students who were unable to attend regular classes. As noted earlier about 16,000 students in Ontario now take distance education courses. COU asserts that: "As long as distance education opportunities exist, there is an accessible alternative to more conventional modes of education - assuming, of course, that what is meant is access to opportunity to study" (COU Briefings, 1984).

The ability to transfer credits from one university to another is a major factor some part-time students face in their attempt to gain access to certain programs and institutions. For students who intend to complete their studies part-time, transferring credits could be a difficult experience given that courses and grades might not be recognized as equivalent or acceptable in meeting degree requirements at some institutions. In addition, the bureaucratic process sometimes involved in applying for and being granted transfer credits can be a significant barrier (Stager 1984:20).

In terms of future participation in part-time postsecondary education, Humphreys and Porter in Part-Time Studies and University Accessibility (1978:132) conclude that there exist

three distinct groups who might form the future clientele for part-time studies. Those who want to upgrade their qualifications either because they are not satisfied with the level of education they now have or because their education has become outdated in light of the changing knowledge, the investment oriented group; those who wish to take university work for their own personal enrichment, the consumption oriented group; and those who had no higher education at all, the disadvantaged group.... (T)here seems to be little impediment to the first two groups taking advantage of what universities offer. As for the third group, no one knows how many people would ultimately be able and willing to benefit from university education if the impediments arising from socio-economic backgrounds were overcome. There is no doubt, however, that the number who could benefit, both from the point of view of their work and their personal enrichment, is substantially greater than the number who are currently enrolled.

For all three groups, there is no supposing that the traditional methods of delivery are the most satisfactory. Thus,...new approaches to prospective part-time adult students with diverse interests will have to be found and these will probably be outside the traditional modalities of providing credit courses. That would be particularly true for the disadvantaged group who probably constitute the largest source of recruits.

Concluding Comments

Ontario has made great inroads in increasing access to postsecondary education. As the key player in the provision of postsecondary education, the government's expansion of opportunities, albeit in capital and student aid programs, has made possible the increased postsecondary participation for several disadvantaged groups.

Some social scientists have, in the process of developing an explanation of who participates in higher education, attached an almost deterministic importance to the influence of social stratification (Stager, 1984:3). Although we agree that socio-economic forces play a significant role in shaping postsecondary participation rates it is important to understand the underlying process that is responsible - namely, the internalization of values and beliefs through family, peer and school socialization (Porter et al., 1979; Anisef et al., 1982; Buttrick, 1977). Women, ethnic minority groups and the economically

disadvantaged develop particular world views, largely as a result of selective exposure to specific beliefs and views, as transmitted by intimate and not so intimate persons in their social milieu. That a change in values and beliefs is possible is exemplified by the substantial increases in participation of women and some ethnic minority groups in Ontario universities and colleges over the last decade (Anisef et al., 1982). These changes would not have occurred unless accompanied by specific value changes and institutions' willingness to make accommodations.

Herberg (1980), in a study of ethnic and racial groups in five Canadian cities, gives us cause to be optimistic rather than pessimistic regarding change. He asserts (1980:21) that

it would seem that families can continue to be the principal cultural brokers for their children and over time even encourage the cultural cohesion of their groups, while not preventing the education of their children.

For visible and ethno-religious minorities, low-income was not a deterrent in encouraging high educational attainment (Herberg, 1980:21):

Contrary to the commonly-held belief...ethnic family features most central to maintaining and strengthening urban ethnic cultures in Canada are by no means inimical to either adults or youth's education.

In many instances, minority group members (and especially visible minorities) encounter interpersonal and organizational obstacles to change. The Special Committee on Visible Minorities in Canadian Society in its Equality Now! report identifies some of these areas (1984:133):

It is important for postsecondary institutions to examine the ways in which they respond to visible minority students whose culture may be different and who may be more mature. Research suggests they are faced with a number of obstacles to participation, including discrimination, non-acceptance, low expectation by teachers and lack of respect for and recognition of the learners' past experience. Postsecondary institutions need to identify recruitment procedures which encourage more visible minorities to take advantage of their programs.

Recently the Ontario government announced programs designed to assist French-language and Native Indian students (June 1984 and July 1984) in participating more fully in the educational system. While such programs deserve full support, their success may well rest on an

effective understanding of how to intervene (e.g. promoting/supporting value changes in schools) in a positive, non-threatening manner. Certainly while the role of the family in stimulating and motivating determined adolescents cannot be overemphasized, it is also important to have the facilities and resources available to accommodate these youth. In light of this, the following quote is worth repeating (Anisef et al., 1982:iv):

We believe that there is an especially critical need to re-evaluate accessibility priorities as we enter the increasingly sober 1980s. There is, for instance, a growing trepidation that the gains in equality of educational opportunity, realized in the 1960s and 1970s, will be eroded by the end of the present decade. It is our conviction that more rather than less needs to be done to convert postsecondary education from a fantasy to a viable alternative for relatively disadvantaged adolescents in Ontario.

In an examination of the determinants of postsecondary enrolment rates in Ontario, Foot and Pervin (1983:20) conclude that:

Whether or not these trends will continue into the 1980s and beyond remains an important issue in public policy. Resumption of real per capita income growth in the province could be expected to increase educational demand, while continuation of the declines in real operating grants to postsecondary institutions in the province would have the opposite impact. Continued high youth unemployment rates might be expected to maintain the demand for a postsecondary education, whereas a reduction might lead to a decline in enrolment rates.... Since the current generation of students are associated with the peak in fertility rates which occurred in the late 1950s, the subsequent declining rates can be expected to result in increased postsecondary enrolment rates over the 1980s and 1990s as smaller cohort sizes reduce the "competition" and hence increase the expected returns to a postsecondary education.

As a consequence, the widespread belief that the next decade or two will produce substantial declines in the enrolments of institutions of higher learning in Ontario (and in Canada) would appear to be in need of urgent re-evaluation. While smaller cohort sizes will undoubtedly reduce postsecondary enrolments...the effects of population aging...and possibly increasing enrolment rates over the period may well counteract these demographic trends. Under such conditions, public policy toward postsecondary institutions, especially universities, should not be determined on the basis of substantial anticipated enrolment declines.

Table 4.1 Ontario Scholars

University	Scholars as % of Grade 13 Registrants					% Distribution of Scholars				
	1979	1980	1981	1982 ¹	1979	1980	1981	1982 ¹	1981	1982 ¹
Brock	10.6	15.0	15.8	11.5	0.5	0.7	0.8	0.8	0.8	0.8
Carleton	23.4	24.5	20.9	19.1	3.8	3.8	3.2	3.6	3.2	3.6
Guelph	24.7	22.8	22.6	21.7	4.9	4.1	4.0	4.4	4.0	4.4
Lakehead	13.9	19.9	16.4	13.8	0.7	0.8	0.8	0.7	0.8	0.7
Laurentian	19.7	20.2	19.0	15.6	1.2	1.2	1.3	1.0	1.3	1.0
McMaster	27.6	25.7	28.8	28.9	7.1	6.0	6.8	7.2	6.8	7.2
Ottawa	30.5	32.4	32.4	29.6	4.3	3.9	4.2	3.7	4.2	3.7
Queen's	45.0	46.9	53.4	61.3	9.9	9.5	9.3	11.0	9.3	11.0
Toronto	41.3	43.3	48.7	48.2	30.0	29.0	29.5	25.7	29.5	25.7
Trent	18.1	20.6	18.8	15.8	0.9	2.0	0.9	0.9	0.9	0.9
Waterloo	46.7	49.0	54.4	54.9	15.8	17.2	16.2	16.7	16.2	16.7
Western	33.2	32.4	35.2	36.6	12.1	13.5	13.3	15.1	13.3	15.1
Wilfrid Laurier	20.7	24.5	31.3	33.4	2.4	2.9	3.2	3.6	3.2	3.6
Windsor	20.5	21.3	22.7	14.1	2.5	2.8	2.9	2.2	2.9	2.2
York	15.8	15.4	12.9	9.3	3.8	3.7	3.5	3.4	3.5	3.4
Total	32.2	33.2	34.8	32.6						

¹ In 1982, visa students were no longer eligible to receive an Ontario Scholar award. Therefore, those schools which had a high visa enrolment may show a drop in the number of Ontario Scholars although the number admitted with 80% or greater in Grade 13 may not have changed.

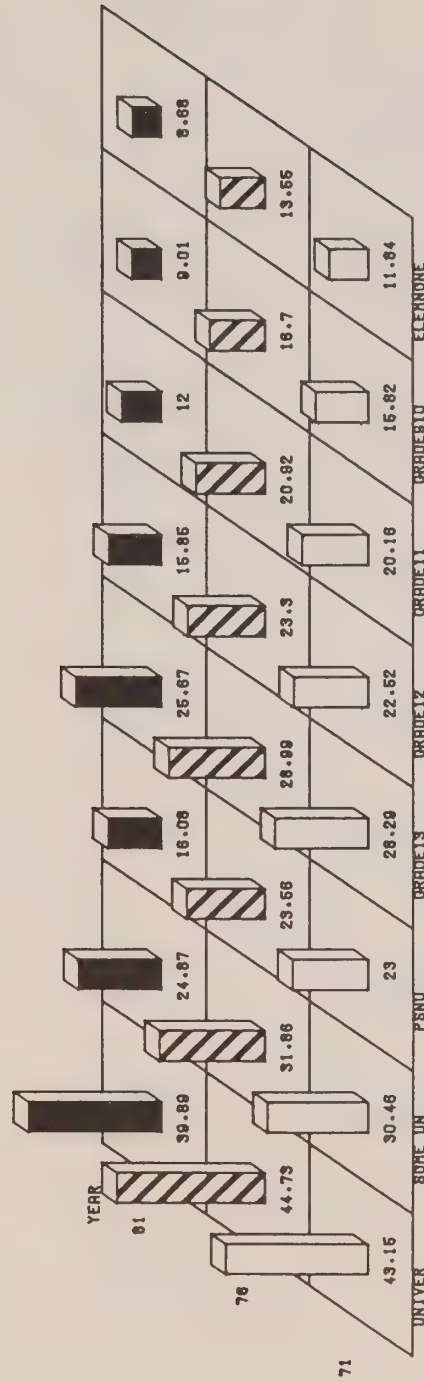
Source: Ontario Universities 1984: Issues and Alternatives. Background Data. The Commission on the Future Development of the Universities of Ontario. June 1984:p. 45.

Table 4.2 Highest Parental Education Level of 1982 Full-Time Undergraduate and Graduate/Professional Degree Holders

Highest Parental	Undergraduate	Graduate/Professional	Ontario - 1981 Census Pop. Aged 15 yrs. and older
	%	%	%
University Degree	32.1	41.7	9.0
Some University	7.9	8.5	1.4
Postsecondary Non-University	21.3	15.9	19.5
Secondary School Diploma	15.8	15.1	19.6
Some Secondary School	11.9	10.2	31.2
Elementary and less	11.1	8.6	19.3

Source: Analysis based on the 1982 Ontario Graduate Survey

Figure 4.1 Percentage Males 18-21 at Home with at Least Some University; by Educational Attainment of Father
- Province of Ontario



Paul Anisef, Application of 1981 Statistics to Postsecondary Participation, Ministry of Colleges and Universities, unpublished report, September 1984.

Figure 4.2 Percentage Females 18-21 at Home with at Least Some University; by Educational Attainment of Father
- Province of Ontario

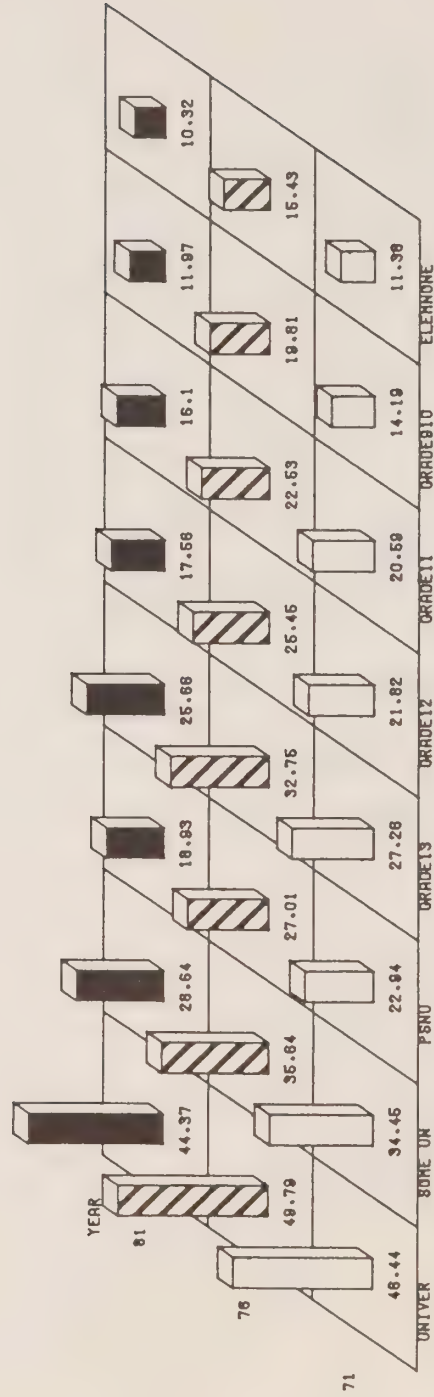
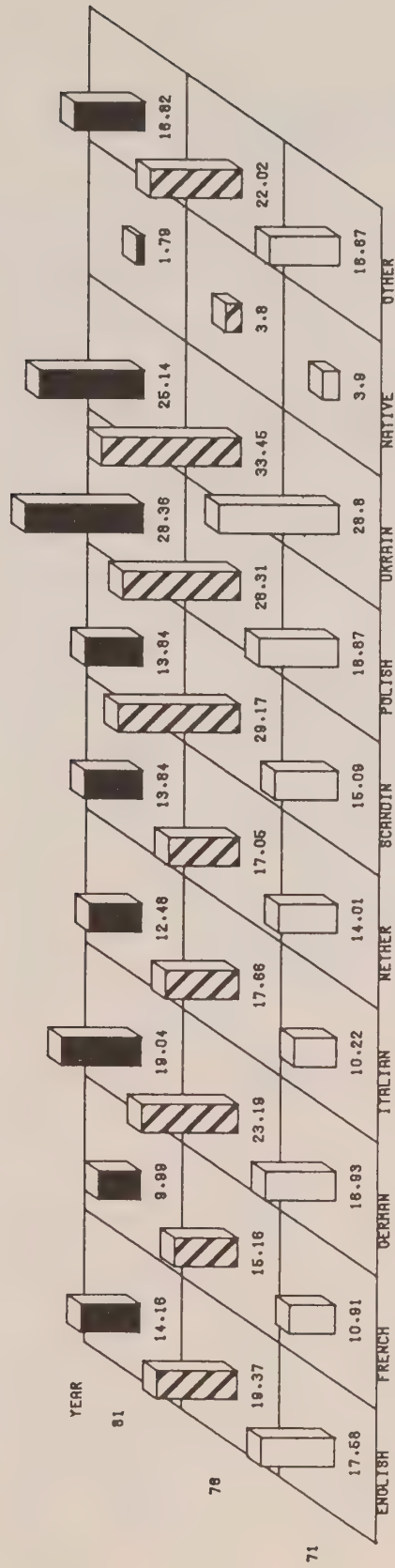
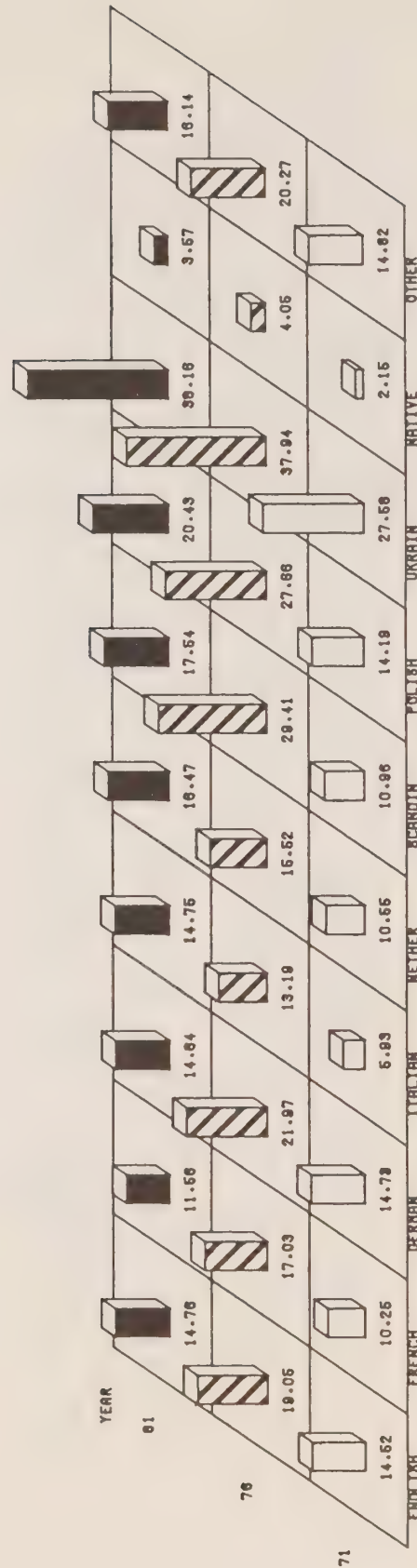


Figure 4.3 Percentage Males 18-21 at Least Some University; by Mother Tongue Categories
- Province of Ontario



Paul Anisef, Application of 1981 Statistics to Postsecondary Participation, Ministry of Colleges and Universities, unpublished report, September 1984.

Figure 4.4 Percentage Females 18-21 at Least Some University; by Mother Tongue Categories
- Province of Ontario



5 ACCESSIBILITY TO POSTSECONDARY EDUCATION IN QUEBEC

Introduction

An analyst reviewing the literature on access to postsecondary education in Quebec is struck by several things. The first is the volume of published research. The second is the strong consensus reflected in the findings; indeed, whether the authors are politicians, public servants or university researchers, they all express a common concern and disappointment. Concern in the face of growing inequality. Disappointment with the partial success (some would say total failure) of the educational reform and later efforts. The authors even agree in their diagnosis; all, or nearly all concede that academic destinies are decided before the postsecondary level.

But although authors from all walks of life acknowledge that the important decisions are made before the postsecondary level, they do not agree as to which stage or level is decisive. Politicians and public servants tend to attack the institutions immediately preceding university or college and blame the educational methods, programs, admission policies and teaching staff of these institutions. In the view of university researchers, access to postsecondary education is determined much earlier and, in part, outside the academic environment. Schools, both elementary and secondary, play a definite role in the decision to drop out or persevere, but not everything is decided at this level.

What are these concerns and what is this unanimous or near-unanimous diagnosis?

On February 3, 1981, before a large audience of university administrators and professors, Camille Laurin (1981:6), then Minister of Education, identified the symptoms that concerned him as a politician:

Our universities are attended by a large number of students of varied ages and backgrounds. Our attendance rates are even, in many respects, quite satisfactory. However, certain aspects of the available data give cause for concern, such as the relatively high rates of part-time attendance, particularly among working adults; the still relatively low rate of attendance among francophone students; a rate of transition from college to university which still leaves room for improvement; and finally, a certain underdevelopment of postgraduate studies.

This is a superficial diagnosis which focuses on symptoms rather than on an analysis of the causes of the malaise. The elements of this verdict were not new. As early as 1979, the Commission d'étude sur les universités (Angers Commission, a Task Force on Universities), established by Camille Laurin and Jacques Yvan Morin, had reached similar and even more scathing conclusions concerning the level of attendance at Quebec universities and their development at the postgraduate level. But this diagnosis was not exhaustive either. For example, it would have been appropriate to examine the varying rates of access for the different faculties and levels by sex.

However, the description of the malaise, coming from the Minister of Education, had a definite impact. Disappointment was added to concern since these facts did not portray the full extent of the malaise, the 'catching-up' process was far from over and neither the Educational Reform (1962-66) nor the Quiet Revolution¹ had lived up to expectations. These two events had opened up the paths to knowledge and some paths to power for Quebecers, but did they guarantee Quebecers a measure of equality (among themselves and with anglophones) in access to higher education? The answer seems to be no. But why?

To understand this concern and disappointment better, requires a review of some of the major characteristics of recent educational history in Quebec. As Dandurand and Fournier (1979, 1984) state, the province did not have a public secondary educational system before the 1960s. Nor did it have a public college system. The organization of public secondary schools and creation of the Department of Education (1964), the foundation of 45 public colleges (Cégeps) beginning in 1969 and the transformation in the 1970s of a number of normal and other schools into university institutions that would form the basis of a decentralized public university system had nourished the hope among Quebecers of seeing a true democratization of education at every level. But, as Dandurand and Fournier (1979) observed, although the educational attainment of Quebec youth "increased substantially," this should not mask the fact

¹On the links between the two, see Rocher, 1973, pp. 159-188.

that "an intensive weeding-out process has continued to operate at every level of education" (p. 204).

An intensive weeding-out process is evident at every level. In this review of the literature, the focus is on studies describing the causes and mechanisms of this process, i.e. those with an explanatory value. However, although Laurin's comments were primarily descriptive, the review of the literature in Quebec dealing with access to higher education is organized around the themes contained in his public statement.

Before going on to propose explanations, it seems essential to set out the facts and answer the following questions:

What is the rate of college and university attendance among Quebecers? What type of attendance (full-time or part-time) primarily characterizes the population of Quebec? How have attendance patterns changed over the past 10 years? How does Quebec compare with the other Canadian provinces in the following three areas: rate of attendance, type of attendance and trends in attendance? In Quebec, are the trends observed in these three areas within the francophone, allophone and anglophone groups the same or different? What obstacles are encountered by young people and adults wishing to undertake postsecondary studies? What are the admission policies of the universities? Do these policies act as obstacles to participation in graduate studies? Do the different linguistic groups pursue higher education in similar proportions? Do a comparable percentage of students graduate?

If not, why?

On the basis of the indices of differentiation set out by Laurin and other indicators what do the authors have to say?

Inequalities in Access to Postsecondary Education

The symptoms of the malaise will be reviewed one by one to examine their treatment by the authors and what explanations they propose for the distinctive characteristics of higher education in Quebec.

1 "...relatively high rates of part-time attendance"

The reader, seeing this statement, may wonder: high relative to what? And why interpret this statistic as something negative? Besides, isn't Quebec simply following the Canadian, North American and, indeed,

international trend? Isn't alternation between work and study perfectly adapted to the personal development of a great many people in this age of rapid technological change?

Indeed, as Table 5.1 illustrates, the number of part-time students has increased considerably in all Canadian universities over the past 12 years and more rapidly than full-time students.

However, it must be admitted that the situation in Quebec is quite distinctive and Tables 5.1 and 5.2 clearly demonstrate this.

In Canada, not including Quebec, there has been in recent years one part-time university student for every two full-time students. In Quebec, the ratio is one to one. Half of the Quebec university population is studying part time. Elsewhere in Canada, this figure is only a third. Tables 3.7 and 3.9 in Chapter 3 show the same thing differently.

As for the participation rate of full-time students among the 18-24 year population Table 5.3 shows that it is lower in Quebec than in Ontario (11% in Quebec and 15.6% in Ontario) and even lower than in Canada as a whole.

Quebec enthusiastically welcomed the creation or development of university structures open to students who were unable or did not wish to pursue higher education on a full-time basis. The fact that a growing number of adults and even, more recently, young people, have been able to adopt a more flexible timetable in pursuing postsecondary and especially university studies was seen by many as a progressive step and a sign of the democratization of higher education. Part-time status was often synonymous with an older, "working" student, and the universities that were most open to such students were seen as "second-chance" universities.

But the intense use of part-time university programs in Quebec is worrisome for several reasons:

- 1 The excessive number of part-time students can be seen as a symptom of the previous failure of the educational system to accommodate entire groups that had the aspirations and ability to undertake collegiate and university studies. Table 5.4 which shows the average age of university students by province, indicates that Quebec students are older than those in other Canadian provinces. This is explained in part, but not completely, by the number of years required to enter university "normally." In Quebec a third of the students are over 30.

- 2 As Bertrand (1982:85) observes, part-time student status involves additional risks in terms of perseverance and graduation. Part-time students "attend university in small doses into their thirties and forties" and are high-risk candidates "because their studies are spread out over excessively long periods and under conditions which substantially reduce the likelihood of graduating."
- 3 In Quebec, one linguistic group, francophones, make up a disproportionate number of part-time university students. Part-time admissions make up a quarter of admissions among anglophones, a third among allophones, but one half of admissions among francophones (A. Lespérance, 1981).
- 4 Part-time students choose - or are offered - short programs in several institutions. Roberge (1982:103) asks whether these short programs have a negative effect on student aspirations, which would be higher in the absence of the alternative offered by the certificates.
- 5 The prestigious programs are rarely offered to part-time students. In the majority of universities, it is impossible to study medicine, dentistry, pharmacy or engineering other than on a full-time basis. This is also the case in the physical and natural sciences.
- 6 As Dandurand and Fournier (1979:209) observe, evening students (who are often part-time students) do not benefit from the same services as day students.
- 7 Moreover, "even where the two categories of students (part-time and full-time) were placed together or the timetables modified (concentration of courses between 4 p.m. and 8 p.m.), numerous problems appeared: it is not easy to meet, simultaneously and equally, such diverse demands from students whose motivations and attitudes toward their studies are very different" (Dandurand and Fournier, 1979:209).

Hence, continuing expansion of part-time programs at Quebec universities is cause for concern since this phenomenon is a present problem and an indication of future problems.

2 "...the still relatively low rate of attendance among francophone students"

This type of data has been particularly well documented since 1976, following the election of the Parti Québécois, and above all since the passage of Bill 101 drew everyone's attention to linguistic factors of differentiation.

The most troubling evidence of such differences was gathered by officials of the Scientific Development Secretariat of the Executive Council. G. Lagacé, in a two-volume study (1981, 1982), presents data on registrations and degrees conferred at the different university levels,

by discipline, for universities in Quebec, the Atlantic Provinces, the Western Provinces and Canada as a whole. The study covers a seven-year period from 1972-73 to 1979-80, and contains separate data on the participation of francophones and anglophones within Quebec.

A certain amount of distortion is inherent in Lagacé's calculations since they are based on the universities and their registrations (and on the language spoken in these universities) rather than on the language of the students. A considerable proportion of francophones (18 to 20%) attend anglophone universities whereas anglophones account for only 1 to 2% of the student population at francophone universities.

In 1972, according to Lagacé, the percentage of the francophone population in Quebec admitted to francophone universities at the undergraduate level, both part-time and full-time, was half the corresponding figure for the anglophone population and the lowest admission rate of all the provinces. Quebec anglophones had the highest rate. Seven years later, in 1979-80, although Quebec francophones had made major advances, the anglophones' attendance rate had also risen, so that the gap between the two linguistic groups was as great as it had been seven years earlier. However, the gap between Quebec francophones and students in other regions of Canada narrowed (p. 145). Moreover, the disparities are also at least as great between the attendance rates of anglophones and francophones at the graduate level in Quebec universities (Lagacé, Vol. 1, 1982).

Has the situation changed since 1979-80? Yes, and for the better. In April 1984, the new Minister of Education, Yves Bérubé, when defending his department's appropriation, compared the rates of admission to Quebec universities for the 18-29 age group, for 100,000 inhabitants of the same age, by language and by student status. Using the data collected by A. Lespérance, he cited the following statistics: the attendance rate for Quebec francophones in 1981 was 23.5; 23.9 for Ontarians (in 1978) and 27.5 for Anglo-Quebecers. Using the same data, he demonstrated that the full-time participation rate among francophones remained lower: 17.4 versus 23.1 for anglophone Quebecers and 21.8 for Ontarians.

A promising study has just been completed² on the attitudes of the francophone Quebec population toward education (Laforce, Sylvain, Trottier, 1984) and will undoubtedly be made public in a few weeks. This study focuses on the specific behavior of linguistic groups (anglophones, allophones, francophones) in Quebec with respect to education. Questions of major interest answered by this study include: How far do francophones, anglophones and allophones pursue their educations? What educational streams and options are chosen by each linguistic group? Where students drop out of programs, at what point does this occur? Which members of these three linguistic groups earn a degree and of what kind? Do academic achievement and socio-economic status cancel out the linguistic variable? Does gender play a role?

3 "...a rate of transition from college to university which still leaves room for improvement"

If the first two observations only indirectly invoke explanatory hypotheses, this one examines research focused on selection factors and looks back beyond the Cégep level at the student's progress through the elementary and secondary levels, and examines the student's family of origin. The greatest volume of research has been published on this the most important section.

However, the above-mentioned assessment concerning the percentage of students who make the transition from college to university calls for a closer examination, critical commentary and preliminary explanations.

First, collegiate education in Quebec must be examined in the context of its role as a university preparatory level. This role is not the only one assigned to the Collèges d'Enseignement Général et Professionnel (Cégeps). These colleges offer, as the name implies, both general training, in the sector of the same name, and vocational training, considered by the majority of the students taking it to be the final phase of their education. Studies in the general sector prepare for

²On behalf of the Conseil de la langue française (Council of the French Language).

university admission. The 'DEC général' (Diplôme d'Études Collégiales secteur général - diploma of collegiate studies, general sector) is the normal path for university admission. Holders of a 'DEC professionnel' (collegiate vocational diploma) can, with additional time and effort, 'retrace their steps,' but generally do not.

The transition from the 'DEC général' to university will be examined and needs to be "improved."

The profile of the student population in question will be examined first, using descriptive analyses, and then examined to discover the reasons why a great many students never acquire a 'DEC général,' a diploma which in principle qualifies the student for university admission, although this is not always true.

C. Saint-Germain (1984:45) aptly summarizes the screening of the student population from Grade 1 to university. Of 100 students in the same demographic cohort, 63 francophones, 63 anglophones and 61 allophones graduate from high school with a general or vocational diploma, the francophones opting more often than their fellow students for the 'CES professionnel' (Certificat d'Études secondaires-professionnel - vocational high school diploma). Of this number, 44 francophones, 52 anglophones and 53 allophones go on to college. Over half of them, i.e. 27 francophones, 31 anglophones and 25 allophones obtain a DEC ('diplôme d'Études collégiales') either general or vocational, more often vocational among the francophones.

Other descriptive studies corroborate these data. For example, J. Lamonde (1982, 1983), after recalling how rapidly the public college sector in Quebec has expanded, since the population of the general sector has doubled over a 10-year period while that of the vocational sector has tripled, summarizes the evolution of the cohorts: of 100 young people of a given age, 50 will go to college. According to Lamonde, the perseverance rate is difficult to measure because of frequent program and sector changes, but girls persevere longer than boys (48% of them will graduate as opposed to 37% of the boys). Older students occupy an important place at college: 25% of the students are between 19 and 22 years of age and 11% are over 23, which leaves only 64% in the traditional 17-19 age group.

The reader interested in following the demographic evolution of college students since the institutions were created in the late sixties can consult the studies by Dufour and Lavoie (1974), Th  berge (1976), Castonguay (1979, 1979a) and Dufour (1981, 1981a), as well as the study entitled Le niveau coll  gial et son acc  s (Access to Collegiate Education) (1980) by the Colleges Branch of the Department of Education, which covers the development of the C  geps since their establishment in 1969-70. At that time, 70% of students were registered in the general sector. Ten years later, in 1980, the proportion had risen to 50-50 (this balance is now shifting slightly in favor of the general sector: 72,498 versus 68,962 in 1981-82. Statistics Canada, Cat. 81-229, 1982:98).

Girls make up a substantial proportion of the vocational student population, enrolling in large numbers in secretarial and nursing courses and in higher proportions than male students in social work programs. They have a higher perseverance and graduation rate at both the secondary and collegiate levels (Saint-Germain, 1984).

In addition to the 140,000 students enrolled in public colleges, there are over 17,000 in private colleges (Castonguay, 1982). Sixty-five percent are registered in general programs (which qualify them for university admission). Among the "vocational" students, 5 out of 6 are girls. Half are studying for a secretarial or business administration diploma (Castonguay, op. cit.).

Mention should be made in concluding this review of the descriptive studies of the work done by Maheu and Maisonneuve (1982). The authors offer a diachronic view covering the years 1976-81 and describe the advances made in rates of high school graduation, college registration and graduation. Rates have improved year after year (p. 24). The proportion of members of a demographic cohort who finish high school, register in college and obtain a DEC is constantly increasing; it is no longer half, but rather two-thirds of students who persevere at each decisive level (p. 23).

Hypotheses will now be examined, the explanations that researchers have proposed in response to the numerous questions raised by drop-out rates at the secondary or collegiate level, differences between

linguistic groups, preferred programs and sectors, and so on. How and why do some students make it to university while others do not?

Published studies based on the ASOPE project data base are particularly useful at this point. The study itself was carried out between 1972 and 1977 (i.e. collection of data), and, as in the above study by Maheu and Maisonneuve, data on drop-out rates, transition from the secondary to the collegiate level and graduation rates should be revised upward. But it seems the proposed explanations should be accepted as long as these trends continue.

If, as noted at the outset, the consensus in the literature in Quebec on access to higher education is striking because of the concerns expressed and the diagnosis proposed, this survey is also remarkable for another reason: the volume of work based on the ASOPE data base and the number of studies attributable directly or indirectly to this research team.

Since this group's work will be discussed frequently in the following pages, some background information is in order.

A.S.O.P.E.³

Basing their approach on a study carried out in Ontario by Marion and John Porter and Bernard Blishen, which examined secondary students (Does Money Matter?, 1973), the two head researchers, Pierre W. Bélanger of the Faculty of Education of Université Laval and Guy Rocher, of the Department of Sociology of the Université de Montréal, undertook in 1971 to study the 'aspirations scolaires et les orientations professionnelles des étudiants québécois' (hence the name ASOPE) (Academic Aspirations and Career Choices of Quebec Students) and conducted a longitudinal study of 20,000 students and 1,500 parents, from 1972 to 1977. Four cohorts were contacted in the first stage, three at the secondary level and one at the collegiate level, and they were contacted again one to four times over a

³ Usually referred to as A.S.O.P.E. However, some authors use the acronym ASOPE.

six-year period, in order to determine accurately (Bédard et al. ASOPE, VII, 1981, p. 14):

the path followed by students in their secondary, collegiate and university studies, over a six-year period, i.e. choices made, directions taken and successive changes of direction, hesitations, fresh starts and failures...

the reasons given by the subject to explain, to himself as well as to the researchers, the ups and downs experienced during this period.

But since the study dealt not only with the educational path followed but also with aspirations, the ASOPE researchers were interested in learning about the world view that underlay these aspirations. Their questionnaire therefore sought to determine (ibid, p. 16):

(the) knowledge and perceptions of young people, their parents and some of their educators concerning the labor market, the various requirements of this market, its constraints and its elasticity, Quebec's current manpower needs, the job opportunities provided by options and course concentrations...

In a more general way, the perceptions that these same subjects have of future developments in Quebec, their expectations regarding future trends, and their attitudes toward these changes...

Changes over time in the subjects' knowledge and perceptions of the labor market and Quebec society...

Over 30 researchers have participated, at one time or another, in the ASOPE team. Their works include reports (listed in the bibliography as 'les cahiers d'ASOPE'), communications, articles published in Canadian education and sociology journals, theses and briefs - more than 100 documents in all. The reader who does not have time to read all of them would do well to consult Reports I and II, which constitute the descriptive analysis of the initial data collected, Report VII, mentioned earlier (Bédard et al., 1981) le projet ASOPE, son orientation, sa méthodologie, sa portée sociale et ses réalisations (The ASOPE Project, Its Orientation, Methodology, Social Scope and Achievements), and Report XIII (ASOPE, 1981a) Les jeunes et la réforme scolaire (Young People and the School Reform). The two 'cahiers' are collective efforts. In 1979, P. Roberge produced, independent of the 'cahiers' and the group

reports, a document which has proven very useful: La recherche ASOPE à mi-chemin (The ASOPE Research Project at the Halfway Point). The reader will find it a guide to the work done before 1979. For more recent work, no summary exists, but 'cahier' XIII (1981a) indicates that analyses and interpretive work are continuing and that detailed summaries are forthcoming.

The review of the ASOPE research is organized around the major sets of factors proposed to explain inequalities: academic aspirations, cultural heritage, economic origin and academic achievement, and, lastly, system and program effects.

Academic aspirations

Since ASOPE is an analysis of the aspirations of Quebec students (on the concept of aspirations, see the article by G. Rocher: "Toward a Psychological Theory of Aspiration" in Explorations in General Theory of Social Science, in Loubser, ed., (1976)⁴ the desires and aspirations of the students questioned are examined. In 1972, from 32 to 36% of francophone students aspired to a university education; among anglophones from 42 to 56% (ASOPE, I, 'les Étudiants,' 1976, p. 103). "A higher proportion of francophones choose the vocational program at the collegiate level while anglophones opt for the general program instead" (ibid). The report continues: "almost 50% of the francophone students at all levels believe they will have some difficulty in achieving these aspirations; the anglophones seem less fearful in this regard at the secondary level" (ibid, p. 104). Once these aspirations have been expressed, how far do the respondents plan to continue their studies? For all students, specific plans fall below aspirations. But more anglophones than francophones plan to pursue a university education (Vol. I, Table 137, p. 228).

⁴In this essay published in honor of T. Parsons, Rocher defines aspiration as follows: "An aspiration may be thought of as an intended plan entertained by a social actor for whom it represents both a goal toward which to strive and a hope for the future; in many instances, it provides a reason for engagement in social action" (Rocher, in Loubser, ed., Vol. 1, 1976, p. 392). This essay is published in French in ASOPE,

These aspirations are themselves a reflection, to a certain extent, of parental expectations and aspirations (ASOPE, 1976, II, p. 52) as well as of the family's cultural status and feedback from the environment, including the school environment. In the latter case, academic success will be particularly decisive.

The ASOPE study repeats, for certain questions, a study conducted in Ontario during approximately the same period. One of the ASOPE researchers decided to compare the academic aspirations of Quebec youth with those of Ontarians (secondary level I and V students in Quebec, Grade 8 and 12 students in Ontario) and the factors influencing these aspirations. The differences observed in aspirations are less marked between Quebec francophones and Ontarians than between Quebec francophones and Quebec anglophones, the Quebec anglophones remaining the group with the highest hopes for the future, just as they are, at the outset, the most privileged socio-economic and socio-cultural group. Social origin does have a dominant influence on aspirations. Differences attributable to the sex of students, although often important, are not always apparent (Laforce, 1979).

The same researcher, L. Laforce, examined the cultural universe of girls and compared it with that of boys on the basis of ASOPE data (1981). In this study, she demonstrates that the labor market envisioned by the female students examined in the study is, as a general rule, different from that envisioned by boys. At the secondary level, girls are conservative in their occupational choices and quite frequently opt for traditionally female occupations. Social origin and certain academic factors largely explain this phenomenon but the study of a number of attitudinal variables indicates that the perception of the role of women in society is also a major influence on the occupational choices made by female students.

These differences between the aspirations and career choices of girls and boys are also found among anglophones. But anglophone girls,

while aspiring to traditionally female occupations, more often than francophones choose to be college rather than high school graduates.

Of course, L. Laforce relied on data gathered at the beginning of the ASOPE study and the situation has changed in certain respects: women now account for 50% or more of the total university population, (Table 5.5). However, they are overrepresented among part-time students (Table 5.6), undergraduate students and low-prestige faculties. As Mr. Laurin would say, this is a situation which "could be improved."

Cultural heritage, economic level, academic achievement

In Cheminements scolaires dans l'école québécoise après la réforme (Academic Progression in Quebec Schools after the Reform), A. Massot (1979) (ASOPE, Vol. V) provides a detailed description of the interplay of the cultural heritage, family economic status and academic achievement factors by academic level, language and public or private character of the school, for a cohort of students at two turning points: the transition from high school to Cégep and from college to university. Massot concludes (Massot, 1979:189-90):

In the section of the student's education analyzed, we observed that variation in academic achievement at secondary level V is related to the family's cultural status, but that this link later disappears at the Cégep and university levels. However, this trend should not be interpreted as a process of autonomization of the student vis-à-vis his background, but rather as the result of a phenomenon of homogenization of the student population by differential selection based on academic achievement. If student autonomization occurs, ...it takes place before secondary V, since by that level, among the students who will survive all the way to university, those from a disadvantaged cultural background succeed proportionately as well as those from a privileged cultural background.

Moreover, Massot remarks that "the rate of transition to university from Cégep-général increases for each level of academic achievement if the student comes from a privileged economic background. The increased risk of failure entailed by a poorer academic performance is offset by additional economic resources" (ibid, p. 190), with the result that "the academic prospects of students of average attainment, but from a privileged economic background, are equal to the academic prospects of students with higher achievement but from a disadvantaged economic background" (p. 190).

At the descriptive level, this ASOPE 'cahier' provides important additional information on the socio-economic origin of students in relation to their choice of the general rather than the vocational sector, at both the secondary and collegiate levels (particularly tables on pages 107, 134 and 136), the choice of the vocational stream being significantly related to a less favorable social origin (father's occupation).

Massot also examines the differences between francophones and anglophones. On the basis of the ASOPE data, he observes that 40% of the students in francophone schools, both public and private, opt for the vocational secondary program as opposed to 12% of the students in anglophone schools. In addition, 87% of francophone graduates of secondary vocational programs do not pursue further education as opposed to 72% in anglophone schools.

The subject of academic perseverance was dealt with by another researcher in the ASOPE group: H. Horwich (1980). By the second year of the secondary level, it can be observed that the aspirations of those who will later drop out differ from the aspirations of those who persevere: the former believe that they will have difficulty in attaining certain academic objectives, even relatively modest ones. Lower aspirations and expectations are combined with a family background of low social status among those who drop out: the parents work in low-status occupations and their income and educational attainment are low; they live in rural areas or in small towns. Academic achievement plays a definite role and, as Roberge observes in commenting on Horwich's findings, "one must also take into consideration satisfaction or dissatisfaction with school organization, equipment, relations with teachers . . ." (Roberge, 1979:29). Finally, three other factors, according to Horwich, are strongly associated with dropping out: peers who have themselves dropped out, personal feelings of alienation, inferiority and powerlessness, and the program of studies.

On the same theme of dropping out of school, the ASOPE 'cahiers' contain an analysis by D. Morrisette (1981), who is particularly concerned with inequalities in education and background. Basing his approach on Staats' social behaviorist model, the author has re-examined

the data on 2,523 subjects (interviewed in 1972, 1974, 1976 and 1977) and reached specific conclusions about the reasons for dropping out (Morrisette, 1981:187):

The development over time of the decision to drop out seems to involve, in the following order, learning conditions, the feeling of alienation, self-image, academic achievement and environmental influences, not to mention, of course, the existence of feedback.

Morrisette's thesis belongs to another set of explanatory factors: system and program effects.

System and program effects

The majority of those who persevere after the secondary vocational program choose the Cégep general program if they went to English schools and the vocational sector if they attended French schools (Massot, 1979).

Commenting on these data, P. Roberge (1979) observes that in addition to the key factors of academic achievement and social origin, it is necessary to analyze the effects of "attending a given school system" (p. 19) on plans and what he calls scholastic destinies. This is precisely what he did in a study of the transition from school to the labor market (Roberge, 1979a). Although this analysis strays somewhat from our subject, one of its findings is relevant: given the same social origin, there is always a higher proportion of high school dropouts among young workers who attended French schools than among those who went to English schools.

After noting that the difference is not great, Roberge focuses on the reasons for dropping out: "Among francophones, the most commonly cited reason was the fact of having completed an end-level course. This reason is three times less likely to be cited by anglophones, who, on the contrary, mention three times more often than francophones uncertainty and the need or desire to pause and take stock of their options" (Roberge, 1979:20). The author sees this as a direct consequence of the difference in importance accorded to the vocational sector by the francophone and anglophone systems.

The vocational sectors at the secondary and collegiate levels are "dead ends," primarily because they are perceived as end-level, and constitute a trap similar to the short programs for adult university

students - the "certificates" which may contribute to lowering student aspirations.

However, the efforts made in Quebec to democratize education have had an effect. L. Laforce (1979) and P. Roberge and P. W. Bélanger (1981a) sought to measure the perception that those primarily affected had of their impact. Laforce, as we have seen, compared the academic aspirations of young Quebecers, both francophone and anglophone, to those of Ontarians, using data from the ASOPE and Survey of Ontario Students' Aspirations (SOSA) studies. Roberge and Bélanger collated the findings of three studies: Breton-McDonald (1965), Porter, Porter and Blishen (SOSA, 1971) and the ASOPE group (1972). Roberge and Bélanger (1981a:292-293) conclude:

After the reform, and this is an indication that it was genuine, the pattern changed. It changed in two ways. In French schools in Quebec and English schools in Ontario, we now observe fewer potential university students at the end than at the beginning of secondary school. This is probably the result of the exercise by the school system of the same function of selection observed in 1965, but this time by means of a different mechanism, no longer by excluding the least promising individuals but by dampening their unrealistic ambitions.

No longer a weeding out, but a cooling out. If this is the case, the reform made no fundamental change in the role of the school in Ontario; it did not impose on the school any change in method. However, the function of the French school in Quebec did change. From being the promoter of the ambitions of a minority of privileged individuals, it became for all the great mechanism of selection. In this perspective, it is interesting to note that the role of the English school in Quebec also changed...it now served to maintain high ambitions which seem to be formed from the beginning of secondary school. In Quebec, school reform... would therefore appear to have had the paradoxical result of bringing the (academic) destiny (of francophones) in line with that of Ontarians and giving the English-language school in Quebec a role that favors the persistence of the very inequalities that it had sought to reduce.

Laforce (1979), however, in comparing the ASOPE and SOSA data, pointed out that the relationship between achievement and academic aspirations is stronger among students from French schools in Quebec than it is among Ontarians or anglophone Quebecers. The "weak" are quicker to limit their aspirations and the "strong" are less often rewarded than their Anglo-Quebec or Ontarian counterparts.

Other publications by ASOPE group members, such as Les inégalités sociales dans l'école québécoise des années '70 (Social Inequalities in Quebec Schools in the Seventies) (1983) by Laforce and Massot, invoke the structural effect to explain inequalities, whether at the secondary, collegiate or university level.

In their work, the ASOPE researchers reveal their familiarity with the hypotheses of Coleman (1966), Jencks (1972), and Thurow (1973) as well as with those of the French sociologists Boudon (1973), Bourdieu and Passeron (1964) (1970) and Baudelot and Estabiet (1971). The group developed sophisticated methods of statistical analysis (notably F. Béland's work on nominal hierarchical frequency or ANOMHI) and endeavored to place its empirical results within a general theory of action as we have seen with the propositions of Rocher.⁵

Several group members concluded that school perpetuates social inequalities, and that these inequalities, far from diminishing, have, at least in the opinion of some researchers, increased. Among francophones, the gap between the 'petite' and 'moyenne bourgeoisie' and the underprivileged classes has widened and a good example of this is seen in the use that is made of private schools by the 'petite bourgeoisie' (C. Héту, 'Cahier d'ASOPE' XII, 1980). This widening of the gap is, admittedly, a

⁵ Rocher concludes his essay on the theory of aspirations with the following words:

The main purpose of this essay was to relativize the studies on youth aspirations by putting them in the light of the largest possible scheme of the general theory of action. In that perspective, we have emphasized that aspirations should be regarded as functions first of the personality type, second of the subcollectivity within society to which the actor belongs or takes as a reference group and third the type of society, depending on which one of the four subsystems has primacy" (Rocher, 1976 in Loubser, Vol. 1, p. 405). The reader will recognize the four subsystems in question as those proposed by T. Parsons in his general theory of action. Translated by Rocher, 1972, in Parsons et la sociologie américaine (Parsons and American sociology), these are adaptation, pattern maintenance, pursuit of goals and integration. It would be interesting to analyze, from the point of view of aspirations, attitudes and academic behavior, to what type of society or subcollectivity allophones, anglophones, and Quebec francophones belong on the basis of the subsystems which have primacy: pattern maintenance, adaptation, pursuit of goals or integration.

considerable departure from the ideal of democratization that inspired the authors of the school reform.

While certain researchers and analysts continue to find explanations for the troubling social facts they observe in a modified functionalist-inspired theory, others turn to action theory, and some support the theory of conflicts and Marxism. In Analyse sociale de l'éducation (Social Analysis of Education), a compendium, of which several chapters were written by researchers associated at one time or another with the ASOPE group, Mellouki and Ribeiro (1983) draw on Marxist theory to account for inequalities in education. They see the school as a system of selection serving the goals of a dominant minority which seeks to further isolate itself and its children from the rest of the world (p. 155).

Outside the ASOPE team, two sociologists from the Department of Sociology of the Université de Montréal have also focused on the problems posed by access to higher education and took a particular interest in the living conditions of university students. Indeed, this is the title of their study Conditions de vie de la population étudiante universitaire québécoise (Living Conditions of the Quebec University Student Population), carried out at the request of the Commission d'études sur les universités québécoises (Task Force on Quebec Universities). Dandurand and Fournier (1979) conducted a study in which they interviewed a stratified sample of 1,617 full- and part-time students, enrolled in bachelor's, master's or doctoral programs, increasing the proportion of postgraduate students in order to ensure an adequate sample and then weighing the results (p. 6) accordingly. Their study demonstrates that students of higher socio-economic origin are not distributed equally among Quebec universities: there appears to be a stratification of universities and colleges (R. Cloutier also comes to the same conclusion, see later) on the basis of students' economic and cultural origin. These two researchers contradict Mr. Laurin's statement on the rates of transition from college to university: selection does not seem to operate at the university entrance level. "Rates of transition from college to university are, in fact, very high" (p. 204). Dandurand and Fournier continue (1979:204):

Although a higher proportion of students from privileged backgrounds is found at the university level than in the working population as a whole, this cannot be attributed solely to the method of selection established by the universities. We now know that selection operates at the elementary level and continues at the secondary level. The secondary level is particularly important since major divisions occur at this point between the different school systems: in the third year of secondary school, students make decisions that determine their academic future and, for example, destine them from that moment onward to the sciences sector or the health field.

With regard to the selection which takes place at the secondary level, Claude Trottier (1984) describes a research project under way which examines the problem of student career choices from the point of view of the decision-making process of teachers and administrators. The entire issue of streams, programs and sections will be studied.

Thus, through the combined interplay of aspirations - which are already partly determined by cultural heritage, economic origin and academic achievement - and the added effect of the constraints imposed by school systems, sectors and programs on individual choices, academic destinies are decided well before university entrance, probably by the elementary level and certainly by the secondary level, where streams and sectors act as strong selectors.

4 "...a certain underdevelopment of graduate studies"

The author of these remarks explained them in the following terms: "teaching activities at the master's and doctoral levels, as well as research activities, are far from experiencing a development comparable to that of undergraduate activities... There is, therefore, an overall imbalance of activities in our universities" (C. Laurin, 1981:9).

These comments reveal not only a considerable lack of awareness and misunderstanding of the history of university development in Quebec, but above all a desire to turn a blind eye to government actions, including those of the Parti Québécois government, which promoted the expansion of a public university system that, for the time being at any rate it must be acknowledged, is not in a position to contribute substantially to postgraduate studies and research. Of course, this situation is improving but no faster than the aspirations of students and the number and competence of professors.

Before analyzing the development of graduate studies in Quebec in the light of other criteria, let us take a critical look at Mr. Laurin's statement. Is it true that postgraduate studies in Quebec are developing, all things being equal, less rapidly than undergraduate studies?

Student populations at the graduate level

It is true that the undergraduate student population increased more rapidly than the number of graduate students during the 10 years before Mr. Laurin's speech. Bertrand demonstrates that the average annual increase of graduate students was almost 2% below that of undergraduates between 1971 and 1981. (Bertrand, 1982:71)

But times have changed. By 1983-84 the average annual increase of graduate students in Quebec universities was almost the same as that of undergraduates.

In fact while the undergraduate population increased by 7.2% per year during the past 12 years in Quebec the graduate student population increased by 6.05%. In both cases the increase was twice that in the rest of Canada (Table 5.6). C. Laurin should have spoken of an underdevelopment of graduate studies in the francophone universities. Is it not in the francophone universities of Quebec that the number of undergraduates is disproportionate to the number of graduate students? Was Mr. Laurin correct in referring to a certain underdevelopment of graduate studies in francophone universities?

This, in any case, is the conclusion reached by Lagacé (1981 and 1982): McGill has always, and Concordia has in recent years at the master's level, accounted for a substantial portion of graduate students.

But the degree of development of graduate studies can certainly not be measured only by the number of students attending master's and doctoral programs or even short graduate diploma programs. A number of other subtler and more persuasive indicators can be used. For example, the number of graduates in proportion to the number of students registered in graduate studies; the number of research projects involving graduate students; the percentage of teaching staff qualified to direct doctoral theses; research grants, publications, especially those that involve students as part of research teams, etc.

In the literature surveyed, several studies examine the number of graduates, others focus on research.

The number of graduates of graduate programs

In 1979, according to Lagacé (1982:159, 177), the rate of graduation in graduate studies in Quebec per 100,000 of the linguistic group concerned was:

	Master's		Doctorates	
Atlantic Provinces	46.7		3.1	
Francophone Quebec	36.6	>	3.7	> 5.3
Anglophone Quebec	84.2		11.9	
Ontario	71.8		11.0	
Western Provinces	35.0		7.1	
Total	52.2		7.6	

G. Lévesque (1982) found that the production of "short diplomas" in Quebec, even at the graduate level, was considerable and should be taken into account when calculating the rate of graduation. His results therefore reflected higher rates than those of Lagacé. But he had to recognize that it is at the undergraduate level that this overproduction of "short diplomas" in Quebec is most glaringly obvious: Quebec alone is responsible for 67% of all certificates awarded to undergraduates - a dubious honor. At the graduate levels, Quebec confers only 25% of all degrees, i.e. no more than its share according to its demographic representation within Canada.

Mr. Laurin's remark should therefore be qualified: the postgraduate student population in Quebec is growing rapidly, indeed more quickly than elsewhere in Canada, but not as fast as the undergraduate student population. The increase in the number of graduate students cannot be attributed solely to francophone universities, according to Lagacé. Finally, in terms of the number and type of degrees conferred, Quebec universities differ widely, depending on whether they belong to the francophone or anglophone sector. Francophone universities undeniably

confer far fewer master's degrees and especially doctorates. Anglophone universities, on the other hand, set themselves apart from the rest of Canada: they confer a much higher proportion of advanced degrees. There are, therefore, two Quebecs: a francophone Quebec which as far as the production of master's degrees is concerned, is comparable to the rest of Canada, but which is far behind all the other provinces except the Atlantic Provinces in the production of doctorates (at least, this is the picture presented by Lagacé in his 1982 study of 1979 data), and an anglophone Quebec that dominates national and even Ontario production of master's degrees and surpasses Ontario slightly with respect to the number of doctorates conferred.

Do more recent data correct this depressing picture?

Table 5.7 illustrates Quebec's vitality in the production of undergraduate degrees and even Masters' degrees: francophone and anglophone universities together account for 25% of bachelor degrees in Canada. But it is noticeable that the percentage of degrees conferred by francophone universities diminishes at each higher level. They account for 19% of bachelor and 17.1% of masters' degrees but only 12.2% of doctorate. By contrast the anglophone universities of Quebec account for an increasing percentage of degrees at each higher level of study: they confer 6.5% of bachelor, 7.6% of masters and 9.3% of doctoral degrees.

Two facts worth mentioning are striking in Table 5.7. The first is the enormous part that Ontario plays in the granting of degrees at all levels, especially at the masters and doctoral level. That province alone accounts for almost half that are granted in Canada. The second is the granting of certificates. These short courses are especially characteristic of Quebec francophone universities. Sixty-seven percent of all undergraduate certificates in Canada are conferred by francophone universities in Quebec.

It seems then that Mr. Laurin's diagnosis is relatively correct. The Quebec universities, especially the francophone ones grant their share of bachelor degrees and much more than their share of certificates. They show a real weakness at the higher levels, especially the doctoral. The reverse was true of the anglophone universities in 1981.

The recent performance of Quebec anglophone universities in the granting of higher degrees and Lagacé's figures should be revised.

Graduation rates

The productivity of programs of study can also be measured on the basis of graduation rates.⁶ This is what the Conseil des universités (Council of Universities) (1984) has done. Comparing Quebec and Ontario, from 1971 to 1980, by families of disciplines, the authors conclude that graduation rates are almost always lower in Quebec, except in the physical sciences, and, for one year, in the life sciences (Table 24). At the doctoral level, however, from 1978 to 1982, graduation rates are comparable and in life sciences those of Quebec are even higher (ibid, Table 26).

Number of full-time students by program at the doctoral level

There are too many doctoral programs in Quebec and they are too widely scattered. The above-mentioned study by the Conseil des universités (1984) illustrates this phenomenon and reveals at the same time that the average number of students registered per program in francophone universities is below the critical threshold, contrary to the Ontario universities and even other Quebec universities (Table 28).

Research

Part of the relative weakness of graduate studies programs in Quebec universities can be attributed to the state of their research programs. These, in turn, undeniably suffer from underfunding attributable to federal research funding policies, or in any case their application to Quebec, inadequate provincial efforts, the researchers themselves and finally the university infrastructures, which should play a more active role in supporting researchers.

⁶Number of graduates divided by the number of registered students, in a given cohort.

Our analysis is based on four documents. Two were recently made public by the Conseil des universités while the other two were compiled by economists at the request of the Fonds Formation de chercheurs et action concertée (FCAC) (Researcher Training and Co-operative Action Fund).

The first document by the conseil is entitled: Avis du Conseil sur l'état et les besoins de la recherche universitaire et de la formation des chercheurs à la lumière de la performance des universités dans les programmes fédéraux (Report of the Conseil on the State and Requirements of University Research and Training of Researchers in the Light of the Performance of Universities in Federal Programs) (1984). We referred to it earlier during the discussion of graduate degrees. To prepare this important document, the conseil undertook consultations in 1983 with the universities and submitted to them a thoroughly documented study, which contained three major findings.

- 1 Quebec's performance in the competitions held by the three funding councils (NSERC, MRC and SSHRC) and the federal departments for university research assistance has been rather poor
- 2 acute problems exist, mainly in the four major francophone universities, especially in the natural science, engineering and health sciences
- 3 there has been a particularly conspicuous failure by Quebec universities in the most innovative federal programs - strategic grants, scientific fellowships (pp. 6-7).

This diagnosis was based on a central thesis: the federal councils and their programs play a major role in the funding and development of university research and the results obtained during the competitions held under these programs provide a good indication of the quality and productivity of universities in the field of research (p. 8).

Neither this diagnosis nor the central thesis were challenged during the consultations. It was particularly important that this point be made clear since Quebec universities have in recent years increasingly tended to receive research funding from the funding councils. "Nine tenths of new federal funding in Quebec is provided by the funding councils,... The share provided by federal departments is decreasing in Quebec, while it is increasing in Ontario" (p. 9).

Using simple indices, the conseil sought to see how the pattern of regional distribution of federal funds had changed during the 1970s (Ibid, p. 11):

The answer is that Quebec, in 1982-83, received exactly the same share as in 1970...roughly 24%.

As for the francophone universities, in 1982-83 they received only 14.4% of all federal grants and 15.5% of all Canadian funding (ibid, p. 12), which was where they stood in 1970.

The second report of the Conseil des universités (1984a) is entitled: Avis du Conseil des universités sur l'impact du financement fédéral sur le développement universitaire du Québec (Report of the Conseil des universités on the Impact of Federal Funding on University Development in Quebec). It reaches the following two conclusions: research funding, where it is based on the criterion of scientific merit, "tends to operate in a cumulative fashion over time to the benefit of those who were the strongest as the outset" (the rich get richer); and the peripheral cultural situation of Quebec universities leads to serious problems in recruiting and retaining scientific personnel (1984a:30-31).

For their part, Lacroix and Dulude (1983) and Dulude and Montmarquette (1983), using both international and national comparisons, attempted to determine what share of the GDP can and should go to university R&D, from both federal and provincial sources, if these governments are really serious about contributing to social development.

Overrepresentation of undergraduate students in Quebec universities, especially francophone institutions; overproduction of undergraduate degrees by these same universities compared with the effort devoted to graduate studies; a low rate of transition to the master's level; a meagre share of federal research grants, especially in health sciences and engineering - these are some of the findings of the authors who studied the development of graduate studies in Quebec universities.

The combined effect of the above-mentioned factors added to a certain lack of motivation and aspirations among francophone students that are recognized as insufficient for them to undertake and pursue long studies leading to graduate degrees - all this has a negative effect on

graduate studies in the vast majority of francophone universities in Quebec.

But is accessibility really the issue here, speaking of the relative weakness of graduate studies in Quebec francophone universities? I think that, on the contrary, the later point aptly illustrates the kind of accessibility we are talking about. Access to what university studies? To what level? For which linguistic group? Under what conditions?

The ASOPE group researchers, in their study, identified attitudes and conditioning on the part of Quebec students which have some bearing on the subjective resistance of francophones to the pursuit of lengthy academic programs.

They termed this phenomenon "temporalité" (focus on time dimension). Roberge (1979a) used questions dealing with perceptions of the future and self-image in relation to career plans to analyze the ability to sustain an effort that one believes will be rewarded after several years of work. According to Roberge (1979a), women and francophones had greater difficulty than other categories of students in projecting themselves through time and envisioning their commitment to a long-term project. See also Mellouki, Temps, temps d'apprendre et itinéraires scolaires (Time, Time for Learning and Academic Directions) (nd).

5 Other factors affecting access to postsecondary education

Social origin, academic achievement, cultural frame or reference - these are all factors that heavily influence academic perseverance and the ability to earn a degree. But other factors such as college and university admission policies, economic constraints imposed by the two levels of government on university funding, and finally regional disparities, contribute to inequalities in access to colleges and universities.

(1) Admission policies

In a recently undertaken study, R. Cloutier and P. W. Bêlanger et al. are analyzing admission policies and access rates to Quebec universities. Mounting a frontal attack on the belief that the educational system contributes to equalizing the conditions of different individuals and social groups, the authors, reiterating in this respect the findings

of studies by Astin (1982), Dandurand, Fournier, Hétu (1979), and Zsigmond and Clark (1981), propose to illustrate that "the recent democratization of the higher education system benefited the groups already attending an institution by offering a greater guarantee of access than previously to the children of the middle and upper classes" (excerpt from an article to be published, p. 4). Knowledge, even knowledge confirmed by a university, is not enough. The acquisition of technical, scientific expertise alone is not sufficient to achieve high social status. The cultural habit of the new status group must also be mastered. The authors maintain that the universities, and above all the faculties and professional associations, sensitive to the interests of these "status groups," have been raising their admission standards since the turn of the century. The authors' main hypotheses are as follows: admission standards in Quebec universities will be particularly restrictive in that "they will give [only these "status groups"] access to the most desirable cultural market; the normative model which prevails in the admission process is based on the prototype of a young man who has not experienced any interruption in his studies, who possesses the cultural skills of the upper class and who has proven himself academically in the field applied for; the new groups, women, adults, young people from lower-class backgrounds, will have access to the least culturally desirable markets unless their performance is truly exceptional; the degree of development of individual student strategies will depend on their knowledge of the economic value of the university cultural market." Obviously, these strategies will be more highly developed among students from the upper classes. R. Cloutier and P. W. Bélanger postulate that there exists an inter- and intra-university stratification, a hierarchy of institutions, disciplines and faculties.

(2) Financial constraints and quotas

External constraints, if one may use the expression, limit university accessibility. Indeed, under the pressure of budget cuts imposed by the provincial government over a period of several years, Quebec universities, tired of unkept promises (on the one hand, the Quebec government announces that it will fund the new students and, on the other, it does not pay the bills), have established quota systems in several faculties

and departments, inspired by realism and sometimes by necessity. Admittedly, this conclusion is not shared by all commentators on university financing. For example, Falardeau (1981) compared the cost of the post-secondary systems of Quebec and Ontario from 1974-75 to 1980-81. According to him, although Quebec possesses less collective wealth (15% less than Ontario in 1980-81), it spent more money than Ontario on educating its 18-20 year olds (\$782 per capita in Quebec versus \$447 in Ontario, p. 69).

Another commentator on government financial policy toward universities, Davenport (1981), makes a detailed analysis of the cost of the subsystems of higher education and observes, among other things, that the share of the university budget devoted to teaching has declined over the years in Quebec, while the relative share of "university administration" has grown (p. 135). Comparing the different educational systems, he notes that the elementary and secondary levels and even the collegiate level have suffered relatively little from cuts in the education budget while the universities have been the most severely affected. He takes issue with Falardeau's analysis and with Quebec-Ontario comparisons by emphasizing that these comparisons do not take into account the different histories of the two provinces in the postsecondary education field, since the Quebec educational system is much younger than Ontario's.

G. Lévesque (1982), in a voluminous Dossier Enseignement supérieur (Report on Higher Education), also responds to Falardeau and concludes that Quebec's financial contribution to educating 18-24 year olds is less than Ontario's.

Defenders of austerity budgets and past or projected cuts justify government action on the basis of demographic studies that show that the age groups that traditionally attend university will decrease in coming years. Of course, supporters of increased resources will reply that these traditional age groups are by no means the only ones attending universities and colleges.

The response of Quebec universities to the fierce purges to which they have been subjected for a number of years has not always been consistent. On occasion, university administrators have really believed that additional students would bring them more money and have courted

potential students. However, seeing that the new admissions were not funded as they had hoped, they halted this open-door policy or limited it to the least costly departments and faculties. As for the others, the faculties of medicine, pharmacy, dentistry, veterinary medicine, computer science and, in general, the faculties and departments that require practical training, a quota system and a professor-student ratio were instituted. Thus, we are now assured that the rich will get richer and the poor poorer. Reacting to the cuts and to the confusion in the system caused by the funding formula, the Conference of Rectors and Principals of Quebec Universities (CREPUQ) organized a central admissions office, which receives and processes applications for admission. For the time being, resistance on the part of certain university administrators to a central system of distributing students is still strong. During this time, deprived of adequate information about the number of places available and the "real" admission criteria, students often apply to three universities, indicating their first, second and third choices. A negative response from the institution of first choice or preferred faculty often arrives late and leaves them without an alternative. Studies under way indicate that a great many students who have been unable to gain access to the most renowned and prestigious universities in the field of their choice are forced to register at a university far from their own or their family's place of residence.

The latter observation leads us to the last of the factors to be examined in this series of additional reasons limiting access to university: distance from major centres.

(3) Distance from major centres? Regional disparities?

Does distance from major cities and cultural centres of high demographic density not further complicate access to postsecondary education? Was it not in order to remedy this problem that Quebec government authorities sought, during the '70s, to decentralize the university and establish institutions in outlying areas that would form a new public university system? However, judging from the findings of Synterey's (1979) study of the ASOPE data, distance from major centres is not the factor which has the greatest negative impact on academic aspirations. These aspirations are strongly influenced by the relative

wealth of the region. "Students from privileged regions always have higher academic aspirations than students from disadvantaged regions" (p. 55). The author adds that this remains true even when other variables are taken into account, such as academic achievement, sex, family size or social class. Even population density plays a minor role in comparison with the privileged or disadvantaged character of a region: "Whether the student lives in a big city or a small village, it is the socio-economic context of the region that determines his academic aspirations" (ibid, p. 58). Economic factors, once again, contribute to inequalities in aspirations and access.

(4) Distance education

As has just been demonstrated Quebec had made some important efforts to ameliorate the effect of distance from large centres on accessibility by creating during the 1970s universities in the regions: Chicoutimi, Rimouski, Outaouais, Trois Rivières. In addition the Télé-Université was established in 1972 specifically to conduct distance education.

Most of the writings on distance education have been about the Télé-Université and its accomplishments. In this category are the reports of Bernier, Pagé, Cormier and Grégoire (1975) and of Pagé, Cormier and Grégoire (1976). In these reports are accounts of the reasons that students gave for taking distance education (occupational upgrading, general knowledge and culture) and of student characteristics. The majority did not have a college diploma. Their average age was 33 years. Most are more than 20 or 30 miles from a university and two-thirds of them would not have been interested in taking a course if it were given on a campus. The reports also discussed the role of the animator.

Three more recent documents deal with the Télé-Université. The first entitled Mémoire de la Télé-Université à la Commission d'étude sur la formation à la distance (1981) describes the clients, the regions they are in, and the courses followed. In the winter session of 1980 there were 15,442 students (five years earlier only 1,576); 61.6% were women. On average students took 1.4 courses each. They lived in the 10 administrative regions of Quebec. The second document Apprendre avec la télévision bi-directionnelle (Learn with Two-way Television) notes the great

need for experimentation and improvement in this still new area. The third document, Formation à distance: perspectives et prospectives (Education at a Distance: Perspectives and Prospects) (Forest and Dao, 1982) reports the rates of failure and of dropping out.

In another study, Dao (1982) reviews the literature on distance education in England, Europe, and the U.S.A. and concludes that there is no typical student in distance education. He notes as do others a strong urban concentration of students.

In 1982, the Quebec government established the Jean Commission to study the education of adults. The final report deals with inequalities of access to education, including distance education. It covers regional disparities and points out that adults in urban centres are more privileged than those in rural centres.

Le Service de la recherche de la faculté de l'éducation permanente de l'Université de Montréal is also interested in the question of distance education. Dunberry (1979) evaluated a multi-media course that was transmitted by satellite to distant regions (Baie Comeau, Haute-riev and Sept-Iles) and the relative satisfaction of the students. Pineau (1978) considers the possibilities of self-learning.

Conclusion

This review of the literature seeking to explain inequalities in accessibility to postsecondary education in Quebec has enabled us to place the analysis of the malaise affecting the educational system in Quebec within a solidly supported empirical framework. It has also enabled us to supplement this descriptive and demographic analysis with sociological research that has focused on explaining these disparities.

The 95 studies reviewed are almost unanimous in expressing concern and disappointment in the face of continuing and, indeed, growing inequalities. But what is the object of this concern?

Among the symptoms of this malaise, i.e. the social facts which cause concern among certain authors, the most obvious and the most frequently cited are: overrepresentation of part-time students in the universities; relatively low attendance rates among francophones; less

than satisfactory rates of transition from college to university, and finally a certain underdevelopment of graduate studies.

Although we must accept and confirm one of the elements of this preliminary diagnosis (the relatively low attendance rate of francophones at the university level), the others should be qualified or even substantially revised, in the light of the work done by analysts and researchers.

For example, the overrepresentation of part-time students in the university population is confirmed only among francophone students and especially women. However, concern about this phenomenon is entirely justified. Beyond the apparent democratization of higher education represented by part-time programs and particularly night courses, the authors demonstrate that part-time student status involves many pedagogical disadvantages, is the source of genuine inequalities in access to knowledge and is associated with a high risk of not obtaining a degree, at every level. This status also completely excludes students from a number of prestigious disciplines.

The underdevelopment of master's and doctoral studies is not characteristic of all Quebec universities. This statement must therefore be qualified. Anglophone universities, on the contrary, especially McGill, "overproduce" advanced degrees, compared to the rest of Canada, including Ontario. On the other hand, francophone universities underperform compared with the other provinces, at both the master's and doctoral levels. Their rapid growth in this field does not erase their excessive concentration on the undergraduate level. This underdevelopment of graduate studies in the francophone system can be explained partly by historical factors (relative youth of several francophone universities) and by the links between research and graduate studies. Indeed, in the development of research, a chronic inability on the part of francophone universities to win their share of federal grants in the competitions organized by the major councils is observed, especially in engineering and applied sciences, but also in health sciences, and the situation has not improved since 1970. But it must be recognized that Quebec does not receive the same financial assistance for research from federal departments that Ontario does.

Therefore, anglophones and francophones in Quebec do not have access to the same programs. It would be more accurate to say that the difference depends on whether one attends an anglophone rather than a francophone university, since we have seen that a considerable proportion of francophones attend English-language universities while the reverse is not true.

As far as the rate of transition from college to university is concerned, the authors surveyed maintain that this is not the problem. This figure is relatively high and continues to improve. A few years ago, only half of secondary school graduates went on to college, and half of college graduates went on to university. Two-thirds of students now make the transition at both levels. However, the authors do blame the mechanisms of selection that operate in a complex manner at an early age, especially within the francophone school and college system, and reduce the chances of reaching the postsecondary level at every step along the way. The chapter on rates of transition provides a perfect opportunity for examining research that has a genuine explanatory value. Most of these studies are the work of a team consisting of researchers from Laval and Montréal universities (ASOPE), whose work, begun in late 1971, is still continuing although the study itself was conducted between 1972 and 1977. The authors do not limit themselves to observing inequalities but go back to the student's family of origin and parents in their effort to identify the obstructing factors. They conclude that selection operates at all levels: elementary, secondary, college and university, sometimes mechanically (on the basis of academic achievement), sometimes in a more subtle but no less effective manner, through the effect, for example, of psycho-social factors such as personal and family aspirations and orientations.

These aspirations and orientations vary depending on the language spoken, social origin, cultural level, academic achievement, indeed the region of residence and the school system attended. In turn, variables such as cultural heritage, parent's economic and social status, academic achievement, pedagogical organization and "values" promoted by the system reinforce the role of self-selection played by aspirations.

The authors analyzed a number of examples of structural effects: Quebec's francophone school system gives much higher priority than the anglophone system to vocational programs, both at the secondary and collegiate levels. The school reform itself consolidated some of these structural effects by reinforcing the "sorting" role of the francophone system and making it easier for the English school system to realize its vocation of sustaining the highest ambitions.

Disparities between francophones and anglophones in access to the most highly prized or in any case most prestigious knowledge are increasing and, despite certain appearances, are far from being eliminated between men and women.

Insofar as the most recent surveys confirm the 1982 (SORECOM) data on francophone Quebecers' perceptions of the market value of college and university degrees, two steps, if taken in conjunction, could counter the dysfunctions of the system: establishment of residence requirements (full-time study) for at least part of the course of studies, accompanied, of course, by grants and loans or, better yet, financial assistance equal to the loss in income experienced by individuals who temporarily give up a job to study.

With respect to research and its funding by the federal government, the Conseil des universités has already made major recommendations to the Quebec government aimed at correcting a number of the problems identified, including those that are most directly related to graduate studies.

Clearly postsecondary students in Quebec should stop trying to do everything at once if they want (but do they want to?) to earn university degrees that will qualify them for positions of leadership and make a serious contribution to the development of both Quebec and Canadian society. But francophone institutions and their professors must correct the open-door policy to undergraduates and part-time students, which places considerable strain on their resources and research capability, especially at a time when the Quebec government is rationing the renewal of positions and is refusing to provide any new resources.

A World of Self-Criticism

Statistics on attendance and graduation are imperfect indicators of the socio-educational development of a community, and, as Rocher tells us, the economic, social, cultural and political consequences of generalized access to postsecondary education are difficult to assess. After reviewing the literature dealing with inequality in access, it would undoubtedly be appropriate to make a critical analysis of the concept of accessibility and above all the ideals and political convictions that underlie this notion, which we will be pleased to do in another review of the literature.

Table 5.1 University Student Status: Comparison Quebec-Canada, 1972-73-1983-84, in absolute numbers

Year	Canada		Quebec		Canada without Quebec	
	Full-time	Part-time	F.T. (1)	P.T. (2)	F.T.	P.T.
1972-73	311,657	146,454	57,827	47,950	253,830	98,504
1973-74	325,161	153,917	63,125	45,393	262,035	108,524
1974-75	339,073	164,808	67,659	50,873	271,414	113,935
1975-76	363,188	183,581	75,020	60,090	288,168	123,491
1976-77	369,273	188,931	75,975	64,891	293,298	124,040
1977-78	366,860	208,043	79,635	76,332	287,225	131,711
1978-79	360,176	214,109	82,016	80,944	278,160	133,165
1979-80	363,456	227,330	86,121	87,617	277,335	139,713
1980-81	382,554	245,060	90,932	95,551	291,622	149,509
1981-82	401,662	251,833	93,562	95,166	308,100	156,667
1982-83	426,420	262,570	97,180	95,760	329,240	166,810
1983-84	439,920	268,290	99,100	95,900	340,820	172,390
% Average annual increase	3.43%	6.93%	5.95%	8.33%	2.85%	6.25%

Source: Statistics Canada, Cat. 81-204 and 81-220

F.T.: Full-time

P.T.: Part-time

Table 5.2 University Student Status: Comparison Quebec-Canada,
1972-73-1983-84, in percent

Year	Canada		Quebec		Canada without Quebec	
	Full- time	Part- time	Full- time	Part- time	Full- time	Part- time
1972-73	68.03	31.97	54.67	45.33	72.04	27.96
1973-74	67.87	32.13	58.17	41.83	70.71	29.29
1974-75	67.29	32.71	57.08	42.92	70.43	29.57
1975-76	66.42	33.58	55.53	44.47	70.00	30.00
1976-77	66.15	33.85	53.93	46.07	70.28	29.72
1977-78	63.81	36.19	51.06	48.94	68.56	31.44
1978-79	62.72	37.28	50.33	49.67	67.63	32.37
1979-80	61.52	38.48	49.57	50.43	66.50	33.50
1980-81	60.95	39.05	48.76	51.24	66.11	33.89
1981-82	61.46	38.54	49.58	50.42	66.29	33.71
1982-83	61.89	38.11	50.37	49.63	66.37	33.63
1983-84	62.12	37.88	50.82	49.18	66.91	33.59

Source: Statistics Canada, cat. 81-204 and 81-220

Table 5.3 Comparison of Full-time University Enrolments for
Canada-Ontario; percentage of population 18-24 years old,
1970-73, in percent

	Canada	Ontario	Quebec
Year	%	%	%
1970	11.8	13.3	8.0
1971	12.0	14.2	8.0
1972	11.8	14.2	8.3
1973	11.9	14.5	8.4
1974	12.0	14.9	8.5
1975	12.5	15.4	9.0
1976	12.4	15.5	9.0
1977	12.0	14.8	9.2
1978	11.6	14.1	9.4
1979	11.5	14.0	9.8
1980	11.8	14.4	10.1
1981	12.2	15.0	10.4
1982	12.2	15.4	10.7
1983	13.5	15.6	11.0

Source: Statistics Canada, cat. 81-569, 81-204, 91-518, 91-520.

Table prepared by S. Bellot for M.-A. Bertrand.

Table 5.4 Age of University Students in Canada by Province, 1981-82¹,
in percent

Provinces	Less than 20 years	20-24 years	25-29 years	30-39 years	40 years and over
Newfoundland	38.0	25.3	11.3	14.0	4.1
Prince Edward Island	32.8	35.2	11.5	12.1	7.2
Nova Scotia	23.8	35.8	11.1	10.5	4.5
New Brunswick	27.7	36.3	11.0	12.4	5.7
Quebec	6.2	39.7	20.6	23.6	9.6
Ontario	14.5	46.5	14.0	16.0	7.4
Manitoba	23.4	38.2	15.2	15.2	7.1
Saskatchewan	22.9	38.2	16.5	14.9	6.6
Alberta	20.6	39.9	18.2	15.4	5.7
British Columbia	17.9	39.9	17.4	15.7	6.5

Source: Statistics Canada, cat. 81-204.

¹Excludes those not reporting their age.

Table 5.5 Comparison of University Students, Quebec-Canada, by sex, 1972-73-1981-82

	Canada		Quebec		Canada without Quebec	
	Men	Women	Men	Women	Men	Women
1972-73	270,714	186,665	62,558	42,667	208,256	143,998
1973-74	267,971	195,428	54,981	37,985	212,990	157,443
1974-75	268,805	211,919	54,264	41,435	214,541	170,484
1975-76	286,061	234,270	61,645	47,201	224,416	187,069
1976-77	300,230	257,488	79,369	61,011	220,861	196,477
1977-78	301,572	273,019	83,286	72,476	218,286	200,543
1978-79	296,827	277,346	85,306	77,654	211,521	199,692
1979-80	299,962	290,824	88,108	85,630	211,854	205,194
1980-81	315,604	312,141	92,604	93,879	223,000	218,262
1981-82	325,970	327,816	93,235	95,493	232,735	232,323

Source: Statistics Canada, cat. 81-204 and 81-220.

Note: In several cases sex not reported.

Table 5.6 Comparison of Study Levels of University Students,
Quebec-Canada, 1972-73-1983-84 and annual increase
in percent

	Canada		Quebec,		Canada without Quebec	
	Under- graduates	Graduates	Under- graduates	Graduates	Under- graduates	Graduates
1972-73	400,123	57,988	89,177	16,600	310,946	41,388
1973-74	418,420	60,658	91,183	17,335	327,237	43,323
1974-75	445,579	58,302	102,490	16,042	343,089	42,260
1975-76	484,070	62,699	117,476	17,634	366,594	45,065
1976-77	493,934	64,270	122,952	17,914	370,982	46,356
1977-78	509,721	65,182	136,927	19,040	372,794	46,142
1978-79	508,013	66,272	142,791	20,169	365,222	46,103
1979-80	523,452	67,334	152,293	21,445	371,159	45,889
1980-81	550,926	76,688	161,234	25,249	389,692	51,439
1981-82	573,964	79,531	162,562	26,166	411,402	53,365
1982-83	605,460	83,530	165,010	27,930	440,450	55,600
1983-84	622,670	85,540	166,350	28,650	456,320	56,890
Annual average increase %	4.63	3.96	7.21	6.05	3.9	3.12

Source: Statistics Canada, cat. 81-204 and 81-220.

Table 5.7 Degrees and Certificates granted in 1981 in the universities of Canada, in Ontario, in Quebec and in the rest of Canada: francophone and anglophone in percent

		Ontario	Quebec		Other	Canada	
			F.	A.	Provinces	%	Number
Under- graduates	Bachelors	42.5	19	6.5	32	100	84,926
	Certificates	17.1	67.5	0.4	15	100	13,880
	Masters	49	17.1	7.6	26.3	100	12,903
Graduates	Doctorates	49.1	12.2	9.3	29.4	100	1,816
	Certificates	20.2	31.9	24.3	23.6	100	1,417
Total							114,942

Source: Statistics Canada, cat. 81-204.

F.: Francophone

A.: Anglophone

6 ACCESSIBILITY TO POSTSECONDARY EDUCATION IN WESTERN CANADA

Introduction

Four provinces comprise the westerly part of Canada: British Columbia, Alberta, Saskatchewan and Manitoba. These provinces are huge, ranging from 247,000 to 359,000 square miles (with a population density of about four persons per square mile) and the population size within each province fluctuates (Alberta especially).

Postsecondary education in the Western Provinces emerged only recently and the character of their networks remains largely unexamined (Sheffield, 1982:133). While the unique physical environment exerts an immediate influence on the organization of postsecondary education in the Western Provinces, economic, political and social factors shape it as well. Campbell (Sheffield, 1982:134-135) summarizes their effect in this way:

In British Columbia, for example, a polarized political climate exists; the pendulum swings from conservatism to socialism and there are perennially thorny relationships between management and labor. The influx of a large immigrant population, job seasonality, and regional economic disparities produce additional problems. In Alberta, other factors affect higher education, among them open terrain and easily identifiable regions, good transportation networks, and clearly definable demographic areas and resource areas. In Saskatchewan and Manitoba, co-operative enterprise is widely accepted - as illustrated by the mammoth wheat pool organizations - but there is no real industrial base, and there are pressing demands to accommodate higher education to the social needs of Native people. There are sharp disparities in wealth among the four provinces. Although the economic base is different in each, the principal emphasis is on agriculture and the exploitation of nonrenewable natural resources. Religious and ethnic affiliation exert little influence on the organization of higher education in the Western Provinces.

The principal feature of higher education institutions in the Western Provinces is their relative recency. Many did not exist 15 years ago. A growing awareness on the part of the public of the importance of education and the need to develop special skills prompted their creation; in many instances, postsecondary institutions emerged as a result of growing demands for adult education (Sheffield, 1982:180). Thus, in Alberta, between 1971-72 and 1981-82, vocational centres increased their

enrolments by 144%. Today, patterns of participation in postsecondary education are in transition with part-time studies (credit and non-credit) and non-university increasingly in demand.

Below are reports and studies pertaining to accessibility in the Western Provinces. It should be noted that the focus on accessibility issues vary by province and that the most comprehensive and recent study was published by the Alberta Advanced Education Planning Secretariat in June 1984.

Alberta

Alberta was molded out of the Northwest Territories in 1905 - well over half a century after British Columbia had become firmly established as a Canadian settlement. The following year the legislature created the University of Alberta in Edmonton. As in other parts of Canada, the sixties constituted the take-off period for great growth and tumultuous change in Alberta's higher education system. Full-time university enrolment climbed rapidly from 4,600 in 1958 to 18,600 in 1968, as did the budget (from \$5 million to \$51 million) (Sheffield, 1982:141).

The Alberta postsecondary system now includes: four universities (i.e. University of Alberta, the University of Calgary, the University of Lethbridge, and Athabasca University); 10 public colleges, the Banff school of Fine Arts, three institutes of technology, four private colleges. Alberta vocational centres and the community vocational centres are in Calgary, Edmonton, Grouard, Lac La Biche and Slave Lake. Four hospital-based schools of Nursing are in Edmonton and Calgary.

Postsecondary Development in Alberta

In her address to the Council of Ministers of Education Conference in November 1982, the Hon. Dr. Bette Stephenson, Ontario's Minister of Education, remarked: "I worry too, about the perception of many of those at this conference that there is a hierarchy of postsecondary institutions, with universities at the top" (Stephenson, 1982:4). The Alberta Department of Advanced Education in their study, Participation Patterns Study (1984:19) (the primary source in this treatment of Alberta), made a similar argument justifying their claim that accessibility to postsecondary education in Alberta is improving:

There is a pervasive attitude among some postsecondary observers which presupposes that equality of educational opportunity exists only if everyone is able to access a university education. This has become problematic in a society which has promoted expansion in the non-university sector during the last decade.

Furthermore, the authors claim that "a pluralistic society is well served by a pluralistic education system" (1984:20). Arguments of this sort run the risk of camouflaging the hierarchical relationships among postsecondary institutions and posing questions such as: what sorts of

students enrol in universities? In colleges or technical institutes? What is the impact on students' 'life chances' (e.g. career choices and satisfaction) of attending university in contrast to other forms of postsecondary education? What is referred to as a "pluralistic education system" obscures and mystifies the reality confronted by most students when choosing their particular postsecondary institution. In making choices, students automatically realize that a university education is more costly and demands more years of study than a college education and, as such, they would experience it during their student years. It follows that those from higher socio-economic backgrounds have more meanings at their disposal and are more likely to choose university than college. Thus, the conceptual redefinition of postsecondary educational opportunities cannot and will not, alter the fact of structural inequalities, it only obscures them.

During the sixties, a period in which postsecondary expansion gained momentum, the most significant development (and similar to British Columbia) occurred in the public college sector. Growth in this area was planned to relieve "pressure on the university and expand non-university educational opportunity" (Berghofer and Vladicka, 1980:25). The demand for postsecondary education after World War II forced "the provincial government to play a more active role. Its influence was particularly felt in the development of the public colleges in the late 1950s and 1960s" (Berghofer and Vladicka, 1980:57).

Although school boards and local citizen's groups were primarily responsible for the creation of these colleges, the government attempted to influence their orientation by making its financial support conditional on the establishment of para-professional, technical, and general programs not available in universities.

The college legislation of 1958 made "the policy of encouraging comprehensive offerings in the colleges...clear and explicit (Berghofer and Vladicka, 1980:57). Throughout the sixties and partly due to accelerating enrolments at the university level, the philosophical underpinings of colleges became less clear and the government began to emphasize the development of the university transfer role of the colleges. A special study was conducted in 1965 by Dr. Andrew Stewart, a former president of the University of Alberta, for the purpose of advising government

planners on a clearer policy on the role of public colleges. In the study, Stewart proposed that colleges should "provide a valid alternative to university education" for those who cannot or do not wish to enter university (Stewart, 1965:15). Stewart also proposed that universities act as senior or graduate institutions while a college program be developed that would serve as a preparation for university studies. However, as Berghofer and Vladicka (1980:57) point out,

The social and demographic turbulence continued and the government was forced to direct its attention to establishing clearer policy. Through a series of acts and policy statements in the late 1960s the government finally endorsed the concept of a broader, more comprehensive role, not only for public colleges, but for agricultural schools and technical institutes as well.

This was made explicit in the first annual report of the Alberta Colleges Commission (1969-70) (Gregor, 1979:46) which defined the following five functions of public colleges:

- (1) to provide the first two years of university transfer programs upon whose completion students may transfer to universities.
- (2) to provide technical and vocational career programs of such quality that students will be prepared to enter a vocation upon completion of their college work.
- (3) to provide upgrading education for those students who need it to continue to more advanced programs.
- (4) to provide adult and continuing education in vocational, avocational and liberal education courses.
- (5) to provide the general education needed by all students regardless of the focus of their other academic or career work.

As enrolments within the universities began to decrease in 1971 for the first time since the 1950s, government planners began to examine the composition of the student population within the postsecondary sector. In Alberta, three areas of concern were identified: rural/urban differences, continuing education and education for Native Canadians. To develop continuing education and to increase postsecondary accessibility in the rural areas, the Department of Advanced Education was established in 1972 (Berghofer and Vladicka, 1980:57)

to exercise a measure of control over the establishment of new programs across the total system, in order to prevent unnecessary duplication of services and inefficient use of the limited resources available for higher education.

It was believed that by co-ordinating a broad selection of courses, ranging from credit courses to life enrichment programs, "equal opportunity" for a larger proportion of the population would be created. Thus, to increase accessibility for those living in rural areas, various institutions were encouraged to extend their services by introducing correspondence courses, establishing satellite campuses and consortia. Northeastern Alberta, in particular, was the target of such efforts. The re-establishment of an Alberta Vocational Centre in Lac La Biche, for instance, was geared to Natives living in that area. It should be noted that the programs available in these centres only provided training in the lower paid occupations. In 1973, the government also established the Alberta Education Communications Corporation (ACCESS) which "provided a broad range of informative programming at every level of development from early childhood to further education" (Berghofer and Vladicka, 1980:29). The recommendations by the Worth Report encouraged the development of a distance educational system through the employment of technological means. Athabasca University, which received permanent status as an undergraduate university in 1975, provided correspondence courses in business and administration, social and physical sciences and the humanities. Enrolments at Athabasca University escalated dramatically, from 150 in 1973 to more than 7,000 in 1982-83.

Although government efforts are generally directed toward expanding opportunities for larger numbers of Albertans, increases in equality of educational opportunity have largely been limited to the vocational and the college sector. Emphasis has particularly been placed on rural groups (including Natives) and older students. Disparities still exist, however. This is particularly evident when observing the socio-economic mix of students from the 18-24 age group and Native Canadians.

Our section on Alberta will analyze three major areas, all of which have particular relevance to access in the Alberta postsecondary system: (a) mature students and their increased participation in the postsecondary system, (b) apprenticeship training and non-credit courses, which have become extremely popular within the Alberta postsecondary milieu, and (c) characteristics and participation rates of the 18-24 population within the postsecondary sector. Before considering these

areas, it is first necessary to establish the influence of in-migration patterns on postsecondary participation rates.

In-Migration and Its Effects on Postsecondary Enrolments

When examining postsecondary participation rates within any given province, it is extremely important to consider the extent of in-migration and how this affects postsecondary enrolments. Alberta is different from other western provinces. A Statistics Canada study, On the Move (1983) observed that "one out of five individuals in the working age population in Alberta was a migrant, compared to one out of 25 in Quebec" (1983:88). Providing general information about the characteristics of in-migrants in Alberta, the survey showed that in 1982, migrants in Alberta comprised 27.1% of the married population aged 25-44 years and 34.3% of the single population aged 20-24 years (Statistics Canada, 1983:7) (Participation Patterns Study, 1984:78).

The effects of migration resulted in an increased proportional representation by population in the 20-24 and 25-44 age group; and decreased proportional representation in the remaining groups.

The latter study also revealed that migrants have higher educational attainments than non-migrants.

Most migrants came to Alberta seeking employment. Thus, the size of the 18-24 age group becomes inflated without an accompanying increase in the postsecondary participation rate. By way of illustration, the full-time participation rate of migrants to Alberta after June 1976 aged 15 to 54 was lower than the rate of non-migrants by 35% for males and 13% for females. Part-time participation rates of the migrant population, however, were well above the rates of non-migrants by over 200% for males and 50% for females. Similar differences were observed for the 17 to 24 age group.

Skill-related postsecondary programs were attractive to most migrants who tended to enrol in part-time or full-time college programs rather than universities. The Participation Patterns Study (1984) notes that "the inclusion of migrants in calculating full-time participation in postsecondary education is estimated to reduce the average rate without migration by about 13% for the 17-24 age group and 20% for the 15-54 age group" (1984:80).

Mature Students

Another important factor to consider in assessing accessibility in Alberta is the increased participation of mature students in postsecondary education in recent years. The Report of the Task Force on Mature Students (1983) summarizes a study conducted in response to this recent trend. Gathering its data from informal interviews and two questionnaires, the task force surveyed 531 mature students enrolled at the University of Alberta. This included "all students aged 25 years or over and all non-matriculated adult students enrolled in a credit course or program at the University of Alberta" (1983:2). Information was obtained on the social characteristics, attitudes and needs of mature students.

The results of the study revealed that in the Winter session of 1983, mature students constituted more than one-quarter of total full-time enrolments and over three-quarters of total part-time enrolments. While women constituted the majority of undergraduate students, men constituted the majority of graduate enrolments. All respondents reported relatively high family incomes; over 50% reported a current level of family income above \$25,000.

The recommendations made by the task force focused on upgrading of basic skills, remediation and admission standards. Although the task force attempted to accommodate mature students in most respects, they proposed that "courses required for matriculation standing should be completed outside the university prior to admission to a faculty" (p. 38). While only a relatively small proportion of non-matriculated mature students applied for admission, this restriction has obvious implications for accessibility.

Apprenticeship Training and Non-Credit Courses

Apprenticeship training and non-credit enrolments have increased disproportionately in contrast to enrolments in other postsecondary institutions. Between 1971-72 and 1982-83, apprenticeship registrations increased 152% and between 1976-77 and 1981-82, non-credit registrations increased by 78%. The popularity of apprenticeship training in Alberta probably resulted from Alberta's need for skilled labor in the

construction industry. In 1980, one-quarter of Canada's apprentices were trained in Alberta.

The apprenticeship program is available at all technical institutes and some public colleges and males have dominated enrolments. In 1983 and 1984, females constituted approximately 2% of all apprentices. Most active apprentices are in the 18-24 age group (63%) while 35% are in the 25-44 age group.

Non-credit courses are popular with people in rural areas and among older students. Between 1973 and 1978, the number of adults taking non-credit courses increased five times, from 56,000 to 283,000 (Berghofer and Vladicka, 1980:47). Public colleges led the increase of non-credit enrolments with over 39,000 more enrolments. The universities and technical institutes rose by 26,799 and 4,103 respectively while enrolments in vocational colleges increased by 13,300.

Characteristics of Postsecondary Students in the 18-24 Age Group¹

Utilizing the Participation Patterns Study by the Alberta Department of Advanced Education as a primary source, this section will examine the patterns and characteristics of postsecondary participation of Alberta students in the 18-24 age group. Variables examined in the study are gender, geographical location, mother tongue background and socio-economic levels determined by the Blishen Scale rating. Special tabulations based on census data for the years 1971, 1976 and 1981 were provided by Statistics Canada and formed the basis for the analysis. It should also be noted that the sample size(s) constituted a major segment of the 18-24 age group in any census year. This use of census data follows that reported in Losers and Winners (Anisef and Okihiro, 1982).

Before examining the results of the study, it is important to note some methodological problems that characterize the study, all of which are explicitly acknowledged by the authors:

¹Readers are urged to consult the tables provided in Chapter 3 and our discussion of these tables in the concluding section of this chapter.

(1) Information about the family (e.g. parental education) are only available for those students who were reported as "living at home" (i.e. at their parents' address). Crucial to the investigation is the extent to which the "living at home" group is representative of all students. Data providing information on family variables such as parental education or ethnic background are based on a subgroup of the total number of students (p. 59). There were marked differences in the representativeness of the living at home group, differences by age, type of study and type of institution attended. Thus, only half of all postsecondary students, aged 18-24 lived at home in 1981. Insofar as participation rates for socio-economic status, gender and mother tongue subgroups were calculated with reference to the 18-24 year old group, the generalizability of accessibility patterns is strongly curtailed.

(2) A further weakness of the study is that the data are for students aged 18-24. An increasing number of students are 25 years and over. According to the study, approximately 25-30% of full-time students, depending on the type of institution, are older students. This age group is not addressed by this study.

(3) There is a distortion of data when examining students from rural areas and their participation in postsecondary education. The study (Participation Patterns Study, 1984:55) explains that:

...a young person from a rural area who becomes a student in an urban area and who is not classified as living at home will become a "not living at home" urban student.... Virtually all postsecondary education institutions are in urban areas...and most students live as close as possible to their institution.

The definition of urban and rural in the data refers to the address of the student to the census rather than to where the person grew up.

Ethnic Groups

Among all ethnic groups in Canada, the two groups who have received the most attention in terms of equality of opportunity are Native Canadians and French Canadians. In Alberta, most ethnic groups have reached a higher educational level than Natives who are still struggling at the primary and secondary levels of education. Consequently, Native participation in the postsecondary sector is deplorable. In 1981, for instance, 6.1% of the Native population aged 18-24 participated in higher

Table 6.1 Postsecondary Participation by Mother Tongue of Parents
(Living with Parents, 18-24) Alberta

Mother Tongue	Census Year	Population Size by Age 18-24	University			Non-University			Total		
			F-T	P-T	Total	F-T	P-T	Total	F-T	P-T	Total
English	1971	51,325	24.0	1.2	25.2	5.8	1.8	7.6	29.8	3.0	32.8
	1976	65,105	19.6	1.0	20.6	8.4	3.2	11.6	28.0	4.2	32.2
	1981	75,595	17.4	1.2	18.6	8.7	2.9	11.6	26.1	4.1	30.2
French	1971	2,930	14.7	1.4	16.2	5.3	1.5	6.8	20.0	2.9	23.0
	1976	2,965	11.6	.8	12.4	7.8	3.5	11.3	19.4	4.3	23.7
	1981	4,095	11.7	1.4	13.1	8.5	4.2	12.7	20.2	5.6	25.8
German	1971	6,665	14.3	.8	15.1	6.2	1.7	7.9	20.5	2.5	23.0
	1976	6,755	17.3	.7	18.0	10.5	3.9	14.4	27.8	4.6	32.4
	1981	9,385	15.1	1.4	16.5	8.9	4.8	13.7	24.0	6.2	30.2
Ukrainian	1971	5,425	24.3	.8	25.1	6.6	1.6	8.2	30.9	2.4	33.3
	1976	5,625	17.7	1.2	18.9	7.9	3.8	11.7	25.6	5.0	30.6
	1981	7,155	17.6	1.5	19.1	7.8	3.2	11.0	25.4	4.7	30.1
Native	1971	2,000	1.3	-	1.3	2.3	.5	2.8	3.6	.5	4.1
	1976	1,020	-	-	-	4.4	1.0	5.4	4.4	1.0	5.4
	1981	2,025	1.2	.7	1.9	2.7	1.5	4.2	3.9	2.2	6.1
Other	1971	8,630	22.4	.9	23.3	6.4	2.4	8.8	28.8	3.3	32.1
	1976	10,560	22.0	1.4	23.4	9.2	3.3	12.5	31.2	4.7	35.9
	1981	17,400	22.3	1.6	23.9	9.4	3.6	13.0	31.7	5.2	36.9

Source: Participation Patterns Study, Alberta Department of Advanced Education, June, 1984.

Table 6.2 Postsecondary Participation by Geographical Location 1971, 1976, 1981

Location	Age Group	Population Size by Age	University			Non-University			Total		
			F-T	P-T	Total	F-T	P-T	Total	F-T	P-T	Total
Rural 1971	18-21	24,045	12.4	.5	12.9	5.7	1.3	7.0	18.1	1.8	19.9
	22-24	13,835	4.7	1.0	5.7	1.2	1.7	2.9	5.9	2.7	8.6
	18-24	37,880	9.6	.7	10.3	4.1	1.5	5.6	13.7	2.2	15.9
Rural 1976	18-21	28,705	8.1	.3	8.4	7.1	2.5	9.6	15.2	2.8	18.0
	22-24	18,205	3.8	1.0	4.8	2.4	3.4	5.8	6.2	4.4	10.6
	18-24	46,905	6.5	.6	7.1	5.3	2.8	8.1	11.8	3.4	15.2
Rural 1981	18-21	33,070	6.7	1.0	7.7	7.3	2.5	9.8	14.0	3.5	17.5
	22-24	22,790	3.4	1.4	4.8	3.0	3.6	6.6	6.4	5.0	11.4
	18-24	55,775	5.4	.9	6.3	5.6	2.9	8.5	11.0	3.8	14.8
Urban 1971	18-21	84,695	17.2	1.0	18.2	5.5	2.1	7.6	22.7	3.1	25.8
	22-24	69,250	9.7	2.8	12.5	2.1	3.6	5.7	11.8	6.4	18.2
	18-24	153,950	13.8	1.8	15.6	3.9	2.8	6.7	17.7	4.6	22.3
Urban 1976	18-21	119,070	14.2	.9	15.1	8.0	3.7	11.7	22.2	4.6	26.8
	22-24	86,895	9.6	2.5	12.1	4.6	5.7	10.3	14.2	8.2	22.4
	18-24	205,960	12.2	1.6	13.8	6.6	4.5	11.1	18.8	6.1	24.9
Urban 1981	18-21	157,970	11.3	1.0	12.3	7.5	3.2	10.7	18.8	4.2	23.0
	22-24	133,835	7.8	3.6	11.4	3.9	4.6	8.5	11.7	8.2	19.9
	18-24	291,800	9.7	2.2	11.9	5.8	3.8	9.6	15.5	6.0	21.5

Source: Participation Patterns Study, Alberta Department of Advanced Education, June 1984.

education with only 1.9% enrolled in universities and 4.2% in the non-university sector (Table 6.1). The Report of the Task Force on Native Students (1978) examined the representation of Native students at the University of Alberta and found that in the fall of 1977 only 47 Native students were enrolled at the University of Alberta. Over half were enrolled in Education with the next highest percentage in Arts. Few gains have been made in other areas. Although approximately 112 programs or short courses were offered on reserves, colonies or predominantly Native settlements in 1982-83, these were mainly concentrated in areas such as academic upgrading and driver training. The high participation rates of Natives in Alberta Vocational Centres such as Lac La Biche and Grouard (70%) and community vocational centres (95%) and low participation rates in the university sector show that much needs to be accomplished if Alberta's Native population is to more fully participate in postsecondary education.

Although admitting that Native participation is "significantly lower than other groups," the Participation Patterns Study asserts that Native participation rose considerably over the 10-year period: (1984:110). The data in Table 6.1 show that this interpretation is potentially misleading. This "considerable rise" in participation was only 0.6% at the university level and 1.4% at the non-university level. The table also shows a drop in full-time non-university participation rates between 1976 (4.4%) and 1981 (2.7%). This strongly suggests a need to operationally define what constitutes an increase or decrease in equality of educational opportunity at the postsecondary level.

Among other ethnic groups in Alberta, Ukrainian mother tongue groups hold the highest university participation rates (25.1% in 1971 and 19.1% in 1981), while German-speaking groups rated highest in the non-university sector (7.9% in 1971 and 13.7% in 1981).

While full-time university participation rates have decreased for most groups over the 10-year period, part-time postsecondary rates have increased for all groups over the same period. This increase, however, results from heavy enrolments in the non-university sector.

Table 6.3 Postsecondary Participation by Blishen Scale of Family Head (18-24 Living with Parents)

Blishen Scale Rating	Age Group	Population Size by Age	University			Non-University			Total		
			F-T	P-T	Total	F-T	P-T	Total	F-T	P-T	Total
1971											
Blishen Scale 70 and over	18-21	2,565	49.1	1.8	50.9	5.3	1.4	6.7	54.4	3.2	57.6
	22-24	480	60.4	3.1	63.5	3.1	1.4	4.5	63.5	4.5	68.0
	18-24	3,050	50.8	1.9	52.7	4.8	1.3	6.1	55.6	3.2	58.8
Blishen Scale 50 to 69	18-21	10,320	31.9	.9	32.8	7.2	1.4	8.6	39.1	2.3	41.4
	22-24	2,045	35.9	4.2	40.1	2.9	2.2	5.1	48.8	6.4	55.2
	18-24	12,365	32.6	1.5	34.1	6.5	1.5	8.0	39.1	3.0	41.1
Blishen Scale Under 50	18-21	43,020	19.6	.8	20.4	6.4	1.7	8.1	26.0	2.5	28.5
	22-24	9,310	20.2	1.9	22.1	3.9	2.8	6.7	24.1	4.7	28.8
	18-24	52,325	19.7	1.0	20.7	5.9	1.9	7.8	25.6	2.9	28.5
1981											
Blishen Scale 70 and over	18-21	4,885	45.3	1.7	47.0	8.7	1.3	10.0	54.0	3.0	58.0
	22-24	1,265	52.6	2.0	54.6	3.2	3.2	6.4	55.8	5.2	61.0
	18-24	6,150	46.6	1.8	48.4	7.6	1.7	9.3	54.2	3.5	57.7
Blishen Scale 50 to 69	18-21	27,435	24.6	1.0	25.6	11.1	3.1	14.2	35.7	4.1	39.8
	22-24	6,680	31.5	4.0	35.5	5.0	4.7	9.7	36.5	8.7	45.2
	18-24	34,115	25.9	1.6	27.5	9.9	3.4	13.3	35.8	5.0	40.8
Blishen Scale Under 50	18-21	52,365	11.1	.7	11.8	9.1	2.9	12.0	20.2	3.6	23.8
	22-24	13,665	13.5	2.9	16.4	5.7	4.8	10.5	19.2	7.7	26.9
	18-24	66,035	11.6	1.1	12.7	8.4	3.3	11.7	20.0	4.4	24.4

Source: Participation Patterns Study, Alberta Department of Advanced Education, June, 1984.

Geographical Location

Considering the limitations examined earlier in this section, a valid analysis of participation rates for rural and urban groups becomes extremely difficult. Be that as it may, the study develops a number of observations worth noting.

For one, gaps still exist between rural and urban full-time postsecondary enrolments. Table 6.2 shows that from 1971 to 1981, the gap between these two groups averages 5.3% while in part-time postsecondary studies the gap was less conspicuous (an average of 2.5%). Second, both rural and urban groups experienced a decrease in full-time university participation rates from 1971 to 1981 while part-time enrolment in all postsecondary sectors increased for both groups. Finally, in 1971, rural students participated in university twice as often as in non-university; this reversed in 1981 when their non-university participation exceeded their university participation (from 6.3% to 8.5% respectively). Urban student participation in the university sector is still higher than in the non-university sector, although the rates are converging. Thus, Table 6.2 shows that in 1971 university participation by urban students was 15.6% with only 6.7% in non-university, while in 1981, the percentages were 11.9% and 9.6% respectively.

Gender

The study notes that although more females graduate from high school, males are more likely to enter the postsecondary sector. Among the women who do enter postsecondary institutions, most "are likely to pursue traditionally female occupations, many of them associated with low income occupations" (1984:97).

Similar to other categories, full-time university participation has decreased for both sexes while non-university and part-time participation has increased. However, more males than females tend to participate in part-time non-university studies. Between 1976 and 1981, the participation rates of both sexes in part-time university studies were similar.

The pattern of participation according to age reveals differences for males and females. For example, 22-24 year old males are more likely to attend a postsecondary institution than their female counterparts (in

1981, the percentage for males was 22% and 14.9% for females). This is largely due to a lower full-time participation rate by this age of females. Male and female 22-24 year olds participate in part-time studies at a significantly higher rate than their younger counterparts.

Socio-Economic Background

The socio-economic background of students was determined through the use of the Blishen Scale, a composite measure of the education, income and prestige of 320 occupations, based on the 1961 census.¹ A Blishen scale rating of 70 and above represents a high level of education, income and prestige; 50-69 represents a medium level of education, income and prestige; and a scale rating of 50 and under represents a low level of education, income and prestige.

Table 6.3 reveals that, controlling for the influence of age, participation rates for all SES categories decreased from 1971 to 1981, particularly in full-time university participation, while participation rates increased significantly for all SES categories in the non-university sector.

The gaps between the postsecondary participation of high socio-economic status and low socio-economic status students between 1971 and 1981 have increased. For example, the gap between the two categories in 1971 averaged 30.2%, while in 1981 the average was 35%. Also, 1981 figures reveal that those from low to medium socio-economic status backgrounds were more likely to participate in part-time postsecondary studies than high socio-economic status students. This finding may document the 'second chance' hypothesis associated with part-time students.

Table 6.4 shows that as the level of parental education increases, so does the probability of a student entering university. The

¹It should be noted that all Blishen calculations are based on the 1961 census. The report makes no mention of corrections for distributional changes (in occupation) for 1971 and 1981. Without such corrections, it is extremely difficult to evaluate trend changes. This caution should be borne in mind when reading the socio-economic part of the Participation Patterns Study.

Table 6.4 Postsecondary Participation by Highest Level of Parental Education
(18-24 Living with Parents)

Highest Level of Parental Education	Year	Population Size by Age 18-24	University			Non-University			Total		
			F-T	P-T	Total	F-T	P-T	Total	F-T	P-T	Total
Grade 8 or less	1971	14,865	10.5	.6	11.1	4.7	1.2	5.9	15.2	1.8	17.0
	1976	13,330	8.0	.6	8.6	6.6	2.9	9.5	14.6	3.5	18.1
	1981	12,400	8.4	.9	9.3	6.1	2.8	8.9	14.5	3.7	18.2
High School	1971	29,000	16.9	.8	17.7	5.9	1.9	7.8	22.8	2.7	25.5
	1976	37,230	12.9	.8	13.7	7.4	3.1	10.5	20.3	3.9	24.2
	1981	36,225	9.5	.8	10.3	7.4	3.0	10.4	16.9	3.8	20.7
Trade Certificate or Diploma	1971	7,010	21.8	1.1	22.9	6.2	2.1	8.3	28.0	3.2	31.2
	1976	8,605	18.6	1.0	19.6	8.7	4.4	13.1	27.3	5.4	32.7
	1981	5,920	10.8	1.1	11.9	7.0	3.5	10.5	17.8	4.6	22.4
Post-Sec. Certificate or Diploma	1971	19,500	29.0	1.8	30.8	7.2	2.1	9.3	36.2	3.9	40.1
	1976	22,525	24.0	1.2	25.2	11.2	3.9	15.1	35.2	5.1	40.3
	1981	45,400	17.6	1.4	19.0	10.8	4.0	14.8	28.4	5.4	33.8
University Degree	1971	6,600	50.8	1.7	52.5	4.0	1.3	5.3	54.8	3.0	57.8
	1976	10,330	45.9	1.7	47.6	9.5	2.2	11.7	55.4	3.9	59.3
	1981	15,725	45.8	2.4	48.2	7.7	1.8	9.5	53.5	4.2	57.9

Source: Participation Patterns Study, Alberta Department of Advanced Education, June, 1984.

Table 6.5 Postsecondary Participation by Family Income (1971 Dollars) (18-24 Living with Parents)

Census Family Income	Age Group	Population Size by Age	University			Non-University			Total		
			F-T	P-T	Total	F-T	P-T	Total	F-T	P-T	Total
1971											
Less than \$5,000	18-24	11,900	13.5	.4	13.9	6.1	1.4	7.5	19.6	1.8	21.4
\$5,000 to \$7,999	18-24	11,100	15.4	.7	16.1	6.6	1.6	8.2	22.0	2.3	24.3
\$8,000 to \$11,999	18-24	18,345	19.9	1.1	21.0	6.3	1.6	7.9	26.2	2.7	28.9
\$12,000 to \$14,999	18-24	12,280	23.9	1.2	25.1	5.8	1.9	7.7	29.7	3.1	32.8
\$15,000 to \$19,999	18-24	12,740	25.4	1.5	26.9	5.2	2.3	7.5	30.6	3.8	34.4
\$20,000 and over	18-24	10,605	36.4	1.7	38.1	4.9	2.0	6.9	41.3	3.7	45.0
1981											
Less than \$5,000	18-24	6,760	8.3	.7	9.0	6.4	1.9	8.3	14.7	2.6	17.3
\$5,000 to \$7,999	18-24	7,720	9.3	1.0	10.3	8.1	2.3	10.4	17.4	3.3	20.7
\$8,000 to \$11,999	18-24	13,700	12.8	1.2	14.0	8.3	2.7	11.0	21.1	3.9	25.0
\$12,000 to \$14,999	18-24	13,015	14.0	1.0	15.0	8.7	3.1	11.8	22.7	4.1	26.8
\$15,000 to \$19,999	18-24	23,780	15.9	1.1	17.0	9.8	3.4	13.2	25.7	4.5	30.2
\$20,000 and over	18-24	50,680	22.8	1.6	24.4	8.6	3.6	12.2	31.4	5.2	36.6

Source: Participation Patterns Study, Alberta Department of Advanced Education, June, 1984.

percentages range from 8.4% (parental education of Grade 8 or less) to 45.8% (parents with a university education). These gaps were much less obvious in the non-university sector.

The gap between the participation rates of students from the lowest and highest levels of family income decreased over the 10-year period (Table 6.5). This may be an artifact of the large increase in proportion of Albertans earning annual incomes in excess of \$20,000. A more precise specification of income levels in 1971 and 1981 would be required to more adequately compare participation rates.

Concluding Observations

The authors of the Participation Patterns Study conclude that postsecondary enrolments have increased substantially throughout the 10-year period covered by the study. In particular, growth in the non-university sector and the increased participation of both the disadvantaged and more advantaged youth in that sector has been substantial. Other striking examples of system growth include part-time studies, apprenticeship training and non-credit enrolments.

In contrast, when the authors adopt a social stratification perspective on accessibility they conclude that "students from more advantaged backgrounds are more likely to attend postsecondary institutions than students from disadvantaged backgrounds" (p. 121). While "in the case of 'mother tongue'... there have been significant gains made by groups other than the traditionally predominant English group" and Native Canadians "nearly doubled their participation rate over the 10-year period," this is true only within the non-university sector (p. 122). Similar conclusions are drawn concerning other traditionally disadvantaged groups such as rural groups and women.

With regard to recent developments occurring within the postsecondary sector, the authors (Participation Patterns Study, 1984:123) note:

In Canada, the decreases in participation rates have been particularly evident in the university sector.... While demographic forecasts predict declining enrolments under ordinary circumstances, instability in labor market opportunities may continue to drive postsecondary enrolments up beyond anticipated levels. This trend is evident in Alberta, where 1982-84 enrolments have been rising steadily due to reduced labor market opportunities. These trends

may have implications for accessibility policies and participation patterns.

Indications of these trends are already reflected in the increased postsecondary participation by part-time students, mature students and in non-degree studies.

British Columbia

The most westerly province, British Columbia experienced stagnation and indecisiveness within its postsecondary institutions until the 1960s when the entire character of higher education changed. While the number of inhabitants in British Columbia increased rapidly, the population was mainly concentrated in the urban areas. The population of Vancouver, Victoria and Burnaby comprises 65% of the total population in the province (Sheffield, 1982:134).

The postsecondary system in British Columbia includes: three universities (University of British Columbia, Simon Fraser and the University of Victoria), 15 community colleges widely dispersed throughout the province which are popular with adult and mature students, and six provincial institutes (Dennison et al., 1982).

British Columbia experienced numerous difficulties in the early sixties with its postsecondary system, including: the prediction of a great influx of students into universities, the concentration of postsecondary educational institutions in Vancouver and the increasing anger exhibited by that portion of the population excluded from participating in the system (Sheffield, 1982). In response to these difficulties, John B. Macdonald, then president of the University of British Columbia, prepared a report (1962) which was to change the nature of the British Columbia postsecondary system. The most important proposal made by Macdonald "was that postsecondary education in British Columbia be decentralized by establishing two-year colleges and additional four-year institutes throughout the province" (Sheffield, 1982:138). Four-year institutes refer to "four-year colleges" offering degree programs and advanced training in the Liberal Arts, Science and Education (Macdonald:1962:50). This recommendation was promptly acted upon by the government. The stage was set for the development of British Columbia's present higher educational system. Instead of remaining a college subsidiary of the University of British Columbia, Victoria College became a university in 1963 while Simon Fraser was established at Burnaby two years later. The next 12 years saw the development of 15 community colleges, strategically placed throughout the province, two art schools, and an institute of technology.

The unique character of British Columbia's community colleges is discussed in Dennison's study of the impact of community colleges in British Columbia (1975). Dennison states that "of all the Canadian provincial college systems, British Columbia has developed a model that is most community-oriented in every respect - finance, governance, curriculum and administrative policy" (Sheffield, 1982:139). The functions of British Columbia community colleges outlined by a 1974 Task Force (B.C., 1974:10-11) are listed below:

- (1) A fundamental purpose of a community college...is to provide learning opportunities and encourage learning throughout the wider community as well as within college walls....
- (2) (They ought to) be designed to meet an increasing demand for recurrent education for part-time as well as full-time students....
- (3) Each type of educational institution should provide different and distinct learning experiences, with none viewed as better or worse, higher or lower, than the other....
- (4) Community colleges should encourage and foster a wide variety of learning styles and instructional methods....
- (5) The governance and operation of every college should reflect the concerns of all elements within the college and its wider community....
- (6) Future college development (as a matter of priority should attempt to meet) the educational needs of those who are geographically, socio-economically, or physically disadvantaged.

In spite of this expansion, studies of British Columbia and other documents show that British Columbians do not have equal access to postsecondary education and that higher education is still mainly available at the coast. The major focus and concerns relating to postsecondary accessibility are rural/urban differences and socio-economic differences. Our section on British Columbia will deal extensively with these areas; in addition, other factors such as age and gender will be discussed. Finally, the nature of province-wide participation rates and degree gaps will be analyzed with reference to the remaining western provinces.

Socio-economic Differences

Neil Guppy in a presentation at the B.C. Under Restraint Conference held at the University of British Columbia in February, 1984 reported (Guppy, 1984:3) that:

Just under 90% of the people born in this province will never get within spitting distance of a university or college...the spitting distance is furthest for children born in the homes of the working class. The probability of kids from working class backgrounds going on to attain a university degree is well below that for kids from upper class backgrounds (in the order of a 300% difference). And that probability has changed very little through time.... Despite increasing rhetoric concerning equality, over time the educational disparity, at the university level, between the working class and the upper class has diminished very, very little.

Guppy's statement is supported and confirmed by a number of studies. According to a report by the University Council of British Columbia (1977), 26% of those enrolled in Grade 12 in 1971 continued their studies at the first year level in universities or colleges. Among this group, it was found that the father's educational level and occupation had a significant influence in determining whether or not the student would continue at the postsecondary level. For instance, among those whose fathers had an educational level of Grade 8 or less few continued. Similarly, while 50% of those whose fathers were professionals enrolled at a university or college, only 15% of those whose fathers were miners, loggers, fishermen and farmers enrolled (p. 2). Family income was found not to make a significant difference in terms of postsecondary participation. The report warns, however, that this may have been largely because most students indicated their family income as "average."

A more recent study conducted by Brown and Poiker (1982) revealed similar trends. Focussing on the personal, social, economic and geographical characteristics of 15,500 British Columbia Grade 12 students in April 1981, the study showed a much greater tendency from 1976 to 1981 for students to prefer a college education or a vocational institution to universities. Among those who preferred university studies, most came from high-income, highly-educated and professional families, while those who regarded colleges as a more realistic choice tended to come from middle-income families where parents were more diverse in their

educational and occupational background. Those students from families whose parents ranked low in income, education and occupational position tended not to continue with their education.

The study showed that students with family incomes under \$24,000 were underrepresented among those who planned to attend a university while those with a family income over \$24,000 were overrepresented in the same group.

Similarly, the largest proportion of students who planned to attend a university had parents with a university degree. Those who planned to enrol in a college tended to have parents with a more varied educational background.

Again, a similar pattern was identified in occupation. The highest proportion of those planning to attend university had fathers who were professionals. Fathers of those who planned to attend college were clearly more diverse in their occupational backgrounds.

The results of the study also showed that academic achievement greatly contributed to the student's decision to enrol at the postsecondary level. Academic achievement, however, is linked with the socio-economic status of the student. Eighty-eight percent of those planning to continue their education at the university level were enrolled in the Arts and Science program versus 43% of the total sample. This group also had the highest academic standing. Of this group 73% had received an A or B average in Grade 11. The group planning to go to college had a lower level of achievement while the lowest levels of academic achievement were found among those who did not plan to continue.

Dennison, in his study on career-technical students in British Columbia, observed that even though "colleges and institutes have a more democratized educational opportunity than universities, their students still represent a selected sample of the population in socio-economic terms" (1983:27). Initiated in August, 1981, the study provided data on the characteristics of career-technical students in British Columbia with regard to age, sex, socio-economic status and area of residence. Career/technical programs are available at all British Columbia community colleges and provincial institutes. The estimated target population numbered a total of 16,410 students who had enrolled in a career-

technical program. Dennison determined the socio-economic characteristics in terms of the father's occupation and the mother's education. In terms of the father's occupation, it was found (Dennison et al., 1983:25) that

career/technical students came from a highly selective sample of the provincial work force.... While 22% of the male work force are listed in managerial/professional jobs, 36% of the fathers of career/technical students fall into this category.

A similar pattern occurred in the mother's educational level (Dennison et al., 1983:25):

While 11.5% of the students' mothers held university degrees, only 3.5% of the female population aged 45 to 64 years are educated to this level. Conversely, only 11% of students' mothers had less than Grade 8 education, whereas 24% of the provincial female population was in this group.

Dennison concludes (Dennison et al., 1983:27) that

...for a variety of reasons, postsecondary education in British Columbia is still somewhat limited. It might be argued that expanded opportunities for part-time, evening study in many career/technical programs would allow for the participation of students from broader socio-economic levels.

Regional Disparities

Despite the expansion of postsecondary education throughout the province, educational opportunities are still mainly available in Vancouver and Victoria. As a report by the British Columbia Ministry of Education (B.C. Ministry of Education, 1978:6) suggested:

There are a number of reasons for regional differences in demand and supply patterns for education. One obvious reason is the geographical distribution of postsecondary institutions, which tend to cluster in the urban areas. (Another is) the demand for upgrading services in the professional areas appears to be heavily urban based, with a widespread demand for services in the vocational and technical area.

Differences between the various regions within the province are great not only in terms of participation rates in higher educational institutions, but also in the type of program and institution chosen. The report by the University Council of British Columbia (1977) stated

that while 33% of those who completed Grade 11 in the North and West Vancouver area continued after Grade 12 at a university or academic college program in 1972, the corresponding percentage for those from the Prince Rupert to Dawson Creek area was less than 13%. Utilizing data provided from various surveys on first year full-time university, college and British Columbia Institute of Technology academic and technical students who were enrolled in the province's Grade 12 the previous year, the report showed that students from urban centres (Vancouver, Capilano and South Vancouver Island) tended to prefer a university education while those from other areas showed a stronger interest in a college education (p. 20). That the situation has not changed is further supported by 1980 figures which show that "relatively, on the average over time, some 25% fewer Grade 12 students from the non-metro region go on to university. For 1980, on a constant population basis, about five metro students become full-time university students for every two from the non-metro group" (Gallagher and Merner, 1981:29).

In describing the characteristics of rural high school students, Brown and Poiker (1982) found that Grade 12 students in urban centres tended to be younger than their rural counterparts. This indicated that urban students are higher academic achievers thereby increasing their chances for access to a postsecondary institution. The study illustrates that the parents of urban students held significantly higher levels of educational attainment than parents of rural students. Twice as many metro students planned to obtain a BA or postsecondary degree than rural students. There is a significant increase in the percentage of university groups among metro students while the percentage choosing college has increased for all regional groups.

Thus, the disparities between regional groups become immediately apparent with regard to university participation in particular (CAUT Bulletin, April, 1984:7):

In 1971-72, 17.2% of students graduating from Grade 12 within metro areas attended university compared to 10.7% from rural areas. By 1982-83, 16% of graduating high school students from metro areas attended university while only 7% of rural graduating high school students attended.

Gender

There appears to be strong sexual stereotyping among high school students in British Columbia with regard to educational training and occupational choice. Brown and Poiker's study (1982) show that male Grade 12 students tend to choose male-dominated educational or occupational fields while female Grade 12 students tend to choose traditionally female educational or occupational training. Brown and Poiker note, however, that female Grade 12 students appeared to have a much stronger interest in the commerce programs than they did in 1976. Female aspirations were higher in terms of completing high school, business school, some postsecondary education and a BA, while male students aspired to post-graduate degrees, technical institute training and trade or vocational training. Since 1976, however, female aspiration towards attaining a post-graduate degree has increased more than their male counterparts.

Zimmerman and Trew (1979) note that "a recent phenomenon has been the increase of part-time women learners who tend to be older than traditional full-time students" (p. 13) (Table 3.8). A significant relationship exists between age, gender and part-time study. This is also confirmed in Dennison's 1981 study on students from academic programs in British Columbia community colleges, where two-thirds of the target population (non-transfer students) were female and Dennison's 1983 study on career/technical students revealed that two-thirds of the career/technical students enrolled in the colleges and the majority (53%) of career/technical students enrolled in the institutes were female. Among this group, two-thirds of the female students were enrolled part-time.

The University Council of British Columbia (1977) provided data on the socio-economic characteristics of the male and female student population, revealing that "in families where the father has few years of formal education, the tendency is for the male rather than the female to continue in postsecondary education" (Bottomley, p. 2). For instance, of those whose fathers had an educational level of less than Grade 8, 20% of the males and 13% of the females continued. The report notes that "as

the father's formal education increases, the proportion of male and female students continuing with postsecondary education narrows. In the 'university-graduate-fathers' education' category, 56% of the male students and 57.5% of female students continued to first year" (Bottomley, pp. 2-3).

Age

According to a report by the British Columbia Ministry of Education (1978) "the forecast is that the 25-44 age group will show significant increases in all regions during the period 1971-91. The growth in this age group indicates a potentially growing market for part-time adult students who are already in the labor force..." (p. 6).

Although (like Alberta), British Columbia has a low proportion of students under 20 years old in contrast with other provinces (Foot, 1981), the 18-24-year-old population has increased steadily, from 8% in 1961 to 10.3% in 1979 (Gallagher and Merner, 1981). Participation rates among the latter age group are comparably low. Though the increase in this group resulted from large numbers of immigrants who tend not to participate in the postsecondary educational system, the low participation rates of the 18-24-year-olds is only partly explained by this fact (Gallagher and Merner, 1981). Full-time postsecondary enrolment as a percentage of the 18-24 age group has been declining steadily in British Columbia (similar to the other western provinces), from 16.9% in 1969-70 to 14.4% in 1982-3.

Meanwhile, part-time mature students (aged 25 and over) are participating in the postsecondary sector in increasing numbers, particularly at the college level. Dennison's study on career/technical students in British Columbia (1983) showed that half of the career/technical students were over 25. This segment of the population tended to enrol on a part-time basis in an attempt to upgrade their skills while the college-age career/technical students enrolled on a full-time basis for the purpose of obtaining a certificate.

Province-Wide Picture

British Columbia has the second lowest participation rate in universities and colleges, in Canada among 18-24-year-olds (Newfoundland has the lowest) (CAUT Bulletin, April 1984:7). Although graduate student enrolment in British Columbia is more favorable (in 1980, British Columbia had 10.1% of national full-time enrolment), less than half of British Columbia's graduate student population are from the province. In 1979, for example, only 45% of British Columbia's graduate students came from British Columbia, 24% came from other provinces and 31% were foreign students (Gallagher, 1982). The percentage of students actually transferring from colleges to universities is extremely low, approximately 10% (Dennison et al., 1981).

British Columbia also ranks lowest of all provinces in attaining BA and first professional degrees among the 18-24 year olds. For example, the number of persons aged 18-24 obtaining university degrees in Ontario is double that of British Columbia.

On the other hand, G. Picot (1980) states that the proportion of the population with a postsecondary education in British Columbia is above the national average (as in Manitoba and Alberta). This is misleading as Neil Guppy (1984:10) points out:

...the majority of British Columbians who today have professional occupations were born outside this province. Likewise, the majority of people in this province with a university education come from outside British Columbia.

In 1979-80 only 43% of those Canadian-born residents who held minority degrees were born in B.C., while 57% were from other provinces (Elkins, Blake and Johnston, 1982).

Concluding Observations

British Columbia's postsecondary institutions continue to have an inadequate representation of low socio-economic and rural groups, particularly at the university level. Although female students have increased their participation at the postsecondary level, these are largely limited to those from urban centres and middle and upper class families. Guppy (1984) points out that "by 1980, nearly one-half of the graduating

university class was female (for undergraduate and first professional degrees). But it is significant to note that much of the expansion in university enrolments occurred as a result of the baby boom and the growth of opportunities for women" (p. 4).

This situation is worsening as the pendulum that Campbell described now swings in a conservative direction (Sheffield, 1982:134). This new trend has definite implications for access to British Columbia's postsecondary institutions. With regard to universities "the government already has the power to unilaterally cut the universities' budgets and it exercised that power in 1982...support per student has shrivelled by 24% since 1972 in real terms" (CAUT Bulletin, December, 1983:8). The quality of education becomes affected as "British Columbia downgrades the importance of university education, research and development and...continued underfunding of the universities 'will make them second-rate'" (CAUT Bulletin, December, 1983:8).

Finally, as Neil Guppy (1984:10) warns:

Further cuts in funds for postsecondary education will shift the context from deleterious downsizing to catastrophic capsizing, catastrophic not only for colleges and universities, but for the entire province.

Manitoba

The more than a million persons living in Manitoba, reflecting on their western neighbors, would agree with Campbell (Sheffield et al., 1982:153) who points out that

when immense herds of buffalo still darkened the broad plains of Alberta and Saskatchewan and a tiny settlement in British Columbia represented merely an out of the way port in a developing empire, southern Manitoba was a well-established crossroads of North America.

Since the early economy was based almost exclusively on agriculture, for many years the population was predominantly rural. In 1984, Manitoba boasted of a buoyant service economy and a revitalized manufacturing sector; also less than 30% of the population lived in rural areas.

The population of Manitoba comprises a mosaic of ethnic groups which makes Manitoba one of Canada's most culturally diverse provinces. The linguistic effect of the immigration is apparent insofar as 26.8% (in contrast to 13% in Canada) of the population reported a mother tongue other than English or French. The other major cultural backgrounds include German, Ukrainian, Polish, Indian (of the Athabaskan, Algonkian and Siouan linguistic groups) and Italian. Approximately 15% of all Native Canadians reside in Manitoba. There, diverse cultural groups are not limited to the large urban centres but are dispersed throughout the rural areas. The cultural diversity of Manitoba has had important implications for accessibility; these will shortly be reviewed.

Postsecondary Education

There are three universities in Manitoba - the University of Manitoba (founded in 1877 seven years after the province was created), the University of Winnipeg and Brandon University. Each is distinct in character, size and in their approach to higher education (Sheffield, 1982:155). Full-time undergraduate enrolments stood at 17,526 in 1982; while graduate enrolment stood at about 1,861 in the University of Manitoba (the only university offering graduate studies). The percentage of non-Manitoban full-time student enrolments was approximately 19% in 1982-83. Part-time university enrolments between 1971-82 have fluctuated, but are increasing, from 17,395 in 1971 to 24,456 in 1982-83

(Manitoba University Grants Commission, 1983:8). The majority of part-time students enrol in the Faculty of Arts (49.7%) (tables 3.5 and 3.6).

While colleges in British Columbia, particularly, and to a lesser extent those in Alberta, are modelled after the United States junior colleges, Manitoba's three colleges (i.e. Red River College, Keewatin Community College, Assiniboine College) are unique in Canada. They had their beginnings in the 1942 Vocational Training Act of the federal government and their mandate is described in the 1973 Oliver Report of the Task Force on Postsecondary Education in Manitoba:

The community colleges in Manitoba are very much trade or vocational schools. They are not really "community" colleges since they respond only partly to specific local needs. They offer a relatively narrow range of choices and they all rely heavily on the demands made by Canada Manpower in determining what courses they will offer and to how many students.

This mandate has had a number of implications for how colleges in Manitoba relate to universities and, perhaps, more importantly, certain consequences relevant to accessibility. Gregor (1979) points out that the college's manpower orientation results in a sustained and strong influence by the federal government. The colleges 'sell' places to the federal department for manpower training and that fosters a dependent relationship. In fact, the Oliver Task Force specifically recommended that the colleges decrease their almost symbiotic link with Canada Manpower. To date, no such change has taken place.

The impact of the colleges on accessibility can be seen in the matter of 'transfer of credit.' The Ontario Commission's The Learning Society identified the principle and outlined the difficulties (p. 33):

To be accessible, flexible, and diverse, our educational system must also provide individuals with opportunities to transfer from institution to institution or from program to program. This does not imply a rejection of quality, standards, or an automatic prescription of admissibility. The opportunity for transfer must exist; a screen should not become a barrier, and perhaps some chances must be taken in individual cases.

Those supporting the unique objectives of Manitoba's college system would argue that arrangements for transfer of credit (in cases other than specific junior college work) will inevitably compromise the college

programs to the extent of causing the colleges to do things which they consider inappropriate (Gregor, 1979:37).

To understand the issues related to accessibility to postsecondary education in Manitoba it is instructive to briefly review historical developments in that province. During the 1960s, Manitoba (like other provinces in Canada) experienced an unprecedented growth in schools and teachers at all levels of education. By the end of the decade student numbers and affluence had begun to decline, and the promised benefits of education were beginning to come under close scrutiny (Gregor and Wilson, 1983:88). A number of educational studies (re curriculum in public schools, public attitudes toward schooling, etc.) were conducted. Among these studies was one, already alluded to as the Oliver Report, that argued for many fundamental changes in the provincial postsecondary system, most of which have not yet been implemented. One of the general principles underscored in this report was that of "access," this goal was stipulated as a provincial priority throughout the next decade.

In 1969, the New Democratic Party (NDP) was elected and brought with it an emphasis on ensuring access of disadvantaged groups to education at all levels (Gregor and Wilson, 1983:101). Illustrative of this philosophy was the encouragement of teacher education programs for Native peoples.

In large part the education of Natives remained the responsibility of the federal government (i.e. reserve-based education). However, the provincial government co-ordinated the education of non-status Native peoples. Responding to this mandate, the Frontier School Division (a major proportion of Northern Manitoba) was established in the seventies.

Frontier Students

A recent study addresses the issue of accessibility of postsecondary education for students from the Frontier School Division (FSD) (Lee, 1983). Sources of data used included school records, related studies and interviews of 1983 and recent secondary school graduates of the FSD. Semi-structured telephone interviews were conducted which included questions on demographics, post-high school activities and intentions, and perceived barriers to postsecondary education. The 1981 to 1983 graduates were randomly selected from the graduate lists of all Frontier

schools with Grade 12 enrolment (including home placement students). The total sample consisted of 15 students. Among the important findings are:

- (1) Grade 12 retention rates for FSD students have increased.
- (2) Frontier students require more time to finish high school than students from the province as a whole.
- (3) The percentage of Frontier students who indicated that they would "definitely" continue with their education at the postsecondary level increased over the last few years.
- (4) A higher percentage of females from the FSD intended to continue at the postsecondary level.
- (5) Although Grade 12 grade point averages for Frontier students were higher than that of the province, first-year university grades were lower.
- (6) More females than males tended to graduate from FSD high schools.
- (7) Parental education of FSD students was relatively low.

The 1970s also witnessed a growing assertiveness on the part of Manitoba's various ethnic minority groups, including the francophone population. This took the form of demands by parents to have their children educated at least in part in their heritage languages. In the late 1970s, Ukrainian and German immersion schools were developed in response to such parental pressures and Hebrew immersion was added in the early 1980s (Gregor and Wilson, 1983:104).

Adult Students

Manitoba's universities and colleges also showed a gradual commitment to adult or life-long learning. By the end of the 1960s, "mature student" arrangements were introduced to allow adults (not possessing normal entrance requirements) to be admitted on a trial basis and, if successful, acquire full regular student status. Ferris (1980) argues that although Manitoba is a more 'open, less class-ridden society' (p. 28), it copes inadequately with an increasing number of mature students, large proportions of whom withdraw prematurely from inadequately designed programs. Ferris (1980:29) describes the problem in some detail:

Perhaps the problem is that we have in Manitoba a postsecondary system that is unable to serve the varied needs of Manitobans. There are a number of constituencies that exist, with very different

needs. There are, for example, two cities of Winnipeg: the outer suburban ring which supplies the majority of both the sequential and mature students of the universities; and the inner-city core, which, incidentally, is extending both south and west, and which has a multiplicity of educational and training needs. There is northern Manitoba, where, as in the inner-city, one of many needs is to provide opportunities for residents to have access to the traditional degree programs, an access that the majority of Manitobans take for granted. There is rural Manitoba with its potential for a flexible adult education service. At a time when the postsecondary system is running out of its traditional clients it is in the interest of the institutions to consider ways in which the educational needs of these various constituencies might be met.

Efforts to study accessibility to postsecondary education in Manitoba from a social science perspective have been modest. In addition to the study by Lee (1983) two other studies (Siemens and Driedger, 1965 and Russell, 1979) were identified.

Geographical Location

Leonard B. Siemens and Leo Driedger (1965) studied the differences among farm, rural farm and suburban youth from the point of view of social experiences, motivations and educational aspirations. Their sample consisted of 1,844 high school students; study was directed toward testing three hypotheses: (1) the more urban the youth the greater their exposure to a diversity of social experience; (2) the more urban the youth the higher their motivations, and (3) the greater the exposure to a diversity of social experience, the higher the motivation.

The results of their data analysis demonstrated a strong relationship between type of residence and the selected factors. Farm youth tended to be of lower economic status than suburban youth, less exposed to information, communication media and less mobile. Farm parents had acquired less education than suburban parents, with rural non-farm parents ranking between these two groups. Suburban and rural non-farm youths reported more consistent work away from home and additional paid summer employment. The authors thus found support for their first hypothesis.

Data from the second hypothesis demonstrated that youths from suburban-type residences scored higher in aptitude measures and high school grades than youth from farm residences. With respect to self-concept (i.e. self-accessed leadership ability), farm youth rated

themselves less than average twice as frequently as urban youth; suburban youth rated themselves above average twice as often as rural youth.

In testing the third hypothesis, the authors found that a greater proportion of suburban youth (two-thirds) than farm youth (one-third) aspired to a university education, a greater percentage of the latter group expected to enter vocational training.

Gender and Socio-economic Status

In 1978 a joint research project of the Department of Education and the Department of Labour and Manpower was implemented. The primary purpose of the study (Manitoba Department of Education, 1979:3) was to

validate post-high school intentions as expressed in Grade 12 with actual outcomes. Furthermore, it was thought that the research should provide information as to why plans were or were not carried out, identify factors which may account for student behaviors differing from stated intentions, as well as identifying historical and current labor force status of students.

This study, similar to the Ontario report Is the Die Cast?, reveals demographic and socio-economic patterns for Manitoba youth that are directly relevant to the terms of reference of our report.

Between 1971-72 and 1976-77 approximately 11,000 Grade 12 students had been surveyed during their last year of high school on their postsecondary aspirations and plans. A sample of about 5,000 of these students was selected for follow-up during May-August, 1978. Responses were obtained from about 3,000 students for a 60% - response rate. The primary social stratification variables employed in the study were sex and socio-economic status as measured by the Blishen index.

The researchers found that students who indicated in Grade 12 that they planned to enrol in university were more likely (70%) to implement that decision than students who indicated they would attend community college (30%). Among the major reasons offered for participating in postsecondary education were: to obtain a degree, learn a trade; to get a better, more interesting job and to obtain a general education. The results of the study further indicated that male and female students tended to carry out their father's and mother's educational expectations for postsecondary education.

After controlling for the influence of SES, a number of interesting gender differences were revealed (although, as a whole, gender

differences appear to be slight). First, a larger percentage of high SES females (78%) than males (67%) participated in postsecondary education; the distribution among low and medium SES males and females was more balanced. Second, "in terms of father's expectations to complete some form of postsecondary education" although there were few differences among high and low level males and females, more medium SES level males (56%) than females had fathers who expected them to complete some form of postsecondary education. Third, many more females from all SES levels tended to rely on "parental or other family aid" than males as their main funding source. Although government aid was chosen as an important source of financial support for a larger percentage of low SES level students, it was a much more important source for low SES level females.

With regard to the impact of SES on post-high school outcome the following findings are worth noting: High SES students were more likely to participate in postsecondary education (78%) than students from the medium (68%) or low SES levels (60%). High SES students tended to enrol in universities while greater proportions of low and medium SES students enrolled in community colleges and other postsecondary non-universities. Insufficient finances to continue postsecondary studies was the most important reason, for males and females alike, for delaying entry to postsecondary education.

Concluding Observations

Gregor and Wilson (1983:113) provide a succinct summary of Manitoba's main preoccupation regarding accessibility-related issues:

Manitoba's history has been a microcosm of the Canadian dilemma: the conflicting claims of the two founding cultures, of the Native peoples, and of the numerous and various ethnic groups who followed. Manitoba's efforts to reconcile those claims within an educational system which must also answer the legitimate expectations, social, economic and personal, of the individual and the larger society, provide valuable insights into how the nation can fulfil its complex and challenging future.

Saskatchewan

Saskatchewan has one of the highest proportions of rural residents of all the Canadian provinces. Stephan and Lyons (1984) estimate that, depending on one's definition, as much as two-thirds of the population lives in rural areas, compared with Quebec, Ontario and British Columbia where only one-quarter lives in similar areas. This dimension of geographical location constitutes an important aspect of student access in Saskatchewan.

By way of illustration, in 1981 the Saskatchewan Department of Education published a discussion paper entitled Rural Education: Options for the 80s. This paper had as its objective, enhancing the quality of rural education and improving rural development. The Department of Education (Saskatchewan Education, 1981:23) in reviewing changing conditions in rural Saskatchewan summarizes these changes:

In the early years Saskatchewan implemented a universal, free education system. Enrolment grew to more than 200,000 students. The depression years brought a temporary halt to the growth of the education programs and only through the persistence of the community did the system survive.

The postwar period can be characterized as a time of organizational changes aimed at providing for greater equality of opportunity...

The 1970s was a time of reflection and consolidation. Schools experienced declining enrolment, education costs continued to rise and basic questions about the benefits of education were asked. During the last decade new strides were made in enhancing the opportunities of special groups. Indian parents were provided the opportunity to serve on school boards. Legislation was passed to provide the handicapped child access to the educational system.

Recommendations were made suggesting various ways in which rural schools could come closer to providing their students with opportunities, similar to those available to urban students. A major obstacle to improving rural education opportunities in Saskatchewan is the many small schools coupled with the ill-effects of declining enrolments; this has led to limitations in the variety of courses and programs offered (Stephan and Lyons, 1984:33-34).

A second important facet of accessibility concerns Saskatchewan's diverse cultural heritage and particularly, the situation of its Native Indians. Nearly 20% of the population reports a mother tongue other than

English or French (compared with a national average of about 13%). The main ethnic backgrounds include German, Ukrainian and Polish as well as English and French.

The Native Indian population, estimated as forming approximately 14% of the provincial population (956,440 in 1981), is one group whose cultural background tends to coincide with economic and social disadvantage. About 42% live in urban centres. These Native peoples suffer unemployment rates between four and 15 times greater than the provincial average.

Universities

Saskatchewan and Alberta have followed quite different courses in the development of their postsecondary systems though they were created during the same decade and their geographic, demographic and social characteristics are similar (Campbell, 1982:146). The University of Saskatchewan was created by statute in 1907 and Regina College, formerly an affiliated college of the University of Saskatchewan become a full degree-granting university in 1959 (Campbell, 1982:147).

The first president of the University of Saskatchewan, Walter Charles Murray, set forth the view that the university was obliged to serve the public (e.g. farmers in the province) directly through its programs and services. This emphasis on institutional 'outreach' is as strongly held today as it was in 1908; it also subsequently shaped the course of development of Saskatchewan's community colleges. Murray in a report to the Senate set out the goals of the University of Saskatchewan (Campbell, 1982:147):

The university's watchword must be service to the state in the things that make for happiness and virtue as well as in the things that make for wealth. No form of service is too mean or too exalted. It is fitting for the university to place within the reach of the solitary students, the distant townsman, the farmer in his hours of leisure, or the mothers and daughters in the home the opportunities for adding to their stores of knowledge and enjoyment.... Whether the work be conducted within the boundaries of the campus or throughout the length and breadth of the province, there should be ever present the consciousness that this is the university of the people, established by the people, and devoted by the people to the advancement of learning and the promotion of happiness and virtue.

According to the Saskatchewan Universities Commission (the functions of which were absorbed by the Department of Advanced Education and Manpower in 1983), the trend toward higher levels of enrolment is strengthening in the province. This trend contradicts earlier estimates of a downturn of the order of 15-25% (Saskatchewan Universities Commission, 1982:1). University enrolments in 1981/82 were at record levels at both the University of Regina and the University of Saskatchewan. Full-time equivalent enrolments rose by 9.4% at the former and 6.1% at the latter. It is interesting to note that 73% of full-time and 54% of part-time undergraduate (day) students study at the University of Saskatchewan.

Enrolment increases were experienced across nearly all programs in 1981/82. Thus, total undergraduate enrolment in Arts and Science programs rose by 18.1%; in Year 1 the increase over 1980/81 was 30.4%, reminiscent of a previous upward surge which the universities experienced in the early 1980s (Saskatchewan Universities Commission, 1982:2).

Postsecondary Non University

The community college system in Saskatchewan had its beginnings in 1973 and the Community Colleges Branch of the Department of Continuing Education is responsible for administering the system. Providing "middle-range education" (a peculiarly Saskatchewan term) to adults and ensuring that educational opportunities are readily accessible to all adults in Saskatchewan constitute the important goals of the community college system. Gordon Campbell (Sheffield, 1981:151) summarizes the thrust of the colleges in this fashion:

In Saskatchewan, the community college unit of the tertiary system resembles none other in Canada. High priority is given, not to buildings and campuses but, rather, to extending through community organization the services of the universities, institutes of technology, the provincial library and other government agencies. Saskatchewan is creating a new structure that emphasizes learning arrangements, rather than a physical plant; the structure is concerned more with its relation to other agencies than with the colleges as an institution per se.... An educational communications network (video, audio, film, print) is being incorporated within the college system to permit maximal accessibility to learning programs in a province with a substantial rural population.... The Saskatchewan system demands that a college have a large degree of

freedom in working out ways to serve the many different rural communities.

Saskatchewan's community colleges are regionally based to decentralize learning opportunities for adults (Saskatchewan Continuing Education, 1983:7), and the colleges make full use of existing community facilities and resources throughout their regions. In 1982-83, three colleges - La Ronge, North East, and West Side - were realigned, coming under the jurisdiction of the Department of Advanced Education and Manpower. The Saskatchewan Indian Community College offered programs on Indian reserves and Crown lands throughout the province, under a joint agreement between Canada and Saskatchewan. Lakeland College served regions in both Saskatchewan and Alberta. Since April 1, 1978, it has been administered by a Board of Governors appointed by the Government of Alberta, with programs in its Saskatchewan region financed by a global grant from the Saskatchewan Department of Advanced Education and Manpower.

Since 1973-74, community college enrolments, including all programs and levels of study, have increased by more than a factor of six to 100,661 in 1982-83. Approximately 68% of those enrolled in college programs in 1982-83 were female and 46.8% of all registrations were persons under 30 years of age. More specifically, 38.1% were between the ages of 30 and 49 and a further 15% were 50 years and older.

A relatively large proportion (29.6%) had a formal educational level below Grade 12. On the other hand, fully 26.8% had completed university or technical training before enrolling in 1982-83.

In addition to the colleges there are also three technical institutes in Saskatchewan (i.e. Kelsey Institute of Applied Arts and Sciences in Saskatoon, Saskatchewan Technical Institute in Moose Jaw, and Wascana Institute of Applied Arts and Sciences in Regina). These institutes, with combined enrolments of 21,141 in 1982-83, deliver a variety of programs leading directly to employment in business, industry or government.

Accessibility to Postsecondary Education in Saskatchewan

Accessibility research at the postsecondary level is limited. Be that as it may, two studies - one at the secondary school level and the other, a study of undergraduates at the University of Saskatchewan, provide some insights on how gender and geographical location relate to student access.

Early School Leavers

A report by Cipywnyk summarizes a study of students who left high school before graduating; 96 (out of 317) Grade 8-12 schools in Saskatchewan were randomly sampled and 752 students were identified as leaving school early in 1980-81, a rate of 7.07%. The female rate (5.93%) was lower than that of males (8.25%).

Each student was mailed a questionnaire requesting information about background characteristics, attitudes toward school and reasons for dropping out. At the same time, the principal of each of the 96 schools was requested to provide information about each student's age, gender and academic performance.

Some of the issues addressed by the report include: the rate of high school dropouts in Saskatchewan, reasons why students left high school early, the activities early school leavers engage in after withdrawing from high school.

An analysis of survey findings revealed that the withdrawal rates for female respondents increased from 1.01% in Grade 8 to 9.69% in Grade 12. The dropout rates for males increased from 1.28% in Grade 8 to 14.50% in Grade 12. Among the major reasons indicated by respondents for leaving school early were: "wasting time," "curriculum not relevant to choice of career," "wanted freedom," "wanted a job," and "dissatisfied with the school." Other reasons given were "failing anyway;" this was selected more frequently by females (32.2%) than males (30.3%).

The percentage of those who said they left because the "hated school" tended to decrease as the grade level increased, from 14.3% among the Grade 9 dropouts to 6.4% among the Grade 12 dropouts. The most

common reason for leaving school early from 1972 to 1975 was "job offer." However, females most often cited "hated school" in 1971 to 1973.

Geographical Location, Gender and Socio-economic Status

A case study of three consecutive cohorts of students (1978, 1979 and 1980) who entered the Secondary Program of the College of Education at the University of Saskatchewan was conducted by Stephan and Lyons (1984). This study sought to identify factors which influenced the performance of students enrolled in the Secondary Program, particularly the urban and rural background of students.

A total of 477 first-year students formed the population. Data relating to the student's age, sex, high school marks, and university courses were assembled from students' records, while questionnaires provided information on parental background and students' perceptions. The overall response rate was 65%.

Approximately 53% of students sampled were from communities of less than 5,000, coinciding with the urban/rural distribution of the province's population. Female students from rural communities outnumbered males by 65:35. The ratio for urban communities was 56:44.

Urban students reported somewhat higher levels of parental education than their counterparts from rural areas. Thus, 51% of urban students and 45% of rural students had at least one parent with postsecondary education (Stephan and Lyons, 1984:35). This socio-economic difference was even more pronounced when father's occupation was substituted for parental education.

Though more urban than rural students felt that their academic preparation for university entrance was adequate, more rural students felt that they had been able to take the high school courses they had wished to select. The authors suggest that rural students were simply more realistic in their expectations than urban students.

The researchers also discovered that rural students have to make greater adjustments to different living conditions and lifestyles than do urban students. For example, most rural students rented apartments and, in some instances, shared them with others while significantly more urban students lived with parents or spouses.

In concluding, the authors point out that although no major differences between urban and rural students were revealed, "it would be misleading to suggest that rural high schools prepare their students academically as well as the urban high schools do" (p. 42).

Native/Indian Education

A major conclusion arrived at in Rural Education: Options for the 80s was that "the continued underachievement of Native/Indian students represents the clearest example of inequality of educational opportunity in Saskatchewan" (p. 44). Based upon interview materials, this study revealed considerable tension between the belief that "everyone in the school system should be treated equally, an assimilationist view, and a recognition that the cultural differences should be respected within the school program" (p. 34). The failure of schools to provide even modest equality of educational opportunity to Native/Indians was traced, in part, to a neglect or misunderstanding of Native/Indian cultural values and beliefs.

Concluding Observations

Saskatchewan is the most rural of the western provinces and heavily dependent on agriculture as well as the production of unprocessed natural resources. As a result, many of its northern, rural and Native residents have restricted access (in contrast to urban residents) to educational and economic opportunities. Thus, interest in issues surrounding postsecondary access is less focused than interest in equality of educational opportunity at the elementary/secondary level. This concern becomes particularly evident when research studies are reviewed; such studies further reveal that geographical location and Native/Indian education are especially important variables when equality of educational opportunity is examined.

Conclusion

The main focus on accessibility to postsecondary education in the Western Provinces has been the expansion of opportunities in the rural areas, particularly Saskatchewan which has the highest proportion of rural residents in Canada. Increasing accessibility for ethnic groups and Native Canadians is a second major concern among the four Western Provinces. For this reason, emphasis has been placed on the development and expansion of non-university postsecondary institutions. Unlike the Cégeps in Quebec, the college systems in the four Western Provinces (as in Ontario) are clearly intended as an alternative to universities. Growing demands for higher education, especially in terms of vocational training and job preparation has necessitated "the provision of broader opportunities for self-development...[this] is reflected in the creation of such institutions as Athabasca University in Alberta and the group of community colleges in Saskatchewan" (Sheffield, 1982:162). Traditionally excluded groups such as those from the rural areas, adult students and the poor are thought to be able to gain access to a postsecondary education by emphasizing an "open door" policy in the colleges. The functions of the colleges vary across the four Western Provinces. In British Columbia, and to some extent, Alberta colleges resemble the junior colleges in the United States; in fact, they are the only two provinces in Canada with a dual function that is, offer both academic (preparation for university) and technical (preparation for employment) programs. In contrast, the college systems in Manitoba and Saskatchewan are unique. Manitoba community college systems are much more vocationally oriented, responding only to specific local needs, while "colleges" in Saskatchewan are merely extensions of services provided by universities and other agencies.

At the secondary level, gains have been made in most of the provinces across Canada (Table 3.2). While retention rates have increased since 1970-71 in the Western Provinces (except Alberta, where retention rates have dropped), total full-time postsecondary participation rates among 18-24-year-olds have either dropped (as in British Columbia and Alberta) or have not changed substantially since 1970-71 (as

in Manitoba and Saskatchewan). In contrast to the deplorable situation in the Western Provinces, full-time postsecondary participation rates among the 18-24-year-olds in Ontario and Quebec have risen steadily since the beginning of the 1970s.

At the college level, Table 3.1 reveals that full-time participation rates among the 18-21-year-olds have remained steady or increased only slightly (as in British Columbia and Alberta) in the Western Provinces while full-time undergraduate participation rates of the same age group have decreased in Alberta and British Columbia. Increases in full-time participation rates at the university level in Manitoba and Saskatchewan are slight.

Among the 18-24-year-olds, the gap between male and female postsecondary participation rates is closing since the beginning of the 1970s, with female participation rates slightly higher in the colleges (except British Columbia). The reverse is true at the university level where male participation rates are higher. Female postsecondary participation rates in all the provinces have increased steadily with the exception of Alberta and British Columbia (Table 3.1).

The proportion of part-time students has increased substantially since the early 1970s (Table 3.7), particularly in British Columbia. Students 25 years of age or older constitute the majority of part-time university enrolments, particularly in Manitoba (80%). British Columbia has the highest proportion of foreign student enrolments and Ontario has the second highest (Table 3.10).

Campbell (Sheffield, 1982:166) in discussing the future of postsecondary education in the Western Provinces speculates that:

In some provinces, especially Saskatchewan and Manitoba, the impact on institutions will be more pronounced because of emigration. Precisely how this (and related trends) will affect institutional output is a current conjecture embracing speculations such as: fewer full-time students will permit more careful attention to part-time students; should unemployment rates remain high, more young people will be encouraged to undertake study, particularly on a part-time basis;...the demand for continuing education will remain high.

7 SUMMARY AND CONCLUSIONS

Accessibility: A Brief Review of Issues, Meanings and Measurement Problems

Postsecondary education in Canada developed at an extraordinary pace throughout the '60s. This expansion responded to the baby boom, the human capital argument endorsed by economists and the demand for increased democratization of education at the postsecondary level. In sharp contrast with the optimism of the liberal '60s, the '70s (and '80s) became the decades of economic retrenchment, cutbacks to postsecondary education and caution. Critics of postsecondary education challenge the usefulness of maintaining an open access policy. They point to the increased costs of fueling our complex postsecondary institutions, to studies that reveal high underemployment and unemployment rates among university graduates and to the so-called negative relationship between the quality of undergraduate education and open access policies. Generally speaking these critics conclude their litany with a call for a return to elite education.

The current financial problems faced by postsecondary education institutions have helped stimulate debate regarding the progress resulting from the democratization of postsecondary education. Be that as it may, whether one chooses to examine an entire society or specific subgroups within that society, the evaluation of whether progress has been made will inevitably become a critical question. Three facets of progress should be borne in mind when we pose the following questions: (1) Has there been progress over time (e.g. an increase in participation rates for the society (type II access) or some important group (type I access)? (2) What progress has occurred relative to other societies or subgroups? For example, have women closed the full-time university participation gap with men - in Canada? In each province? (3) Has there been progress at different levels? Thus, while women have narrowed the distance (re participation in university) between themselves and men, have they experienced similar progress with reference to the selection of non-traditional fields or programs of study? These sorts of questions

are strategically important for developing a fuller understanding of access to universities and colleges.

The most frequently employed index of educational opportunity at the postsecondary level is the participation rate (calculated by dividing total university or total postsecondary full-time enrolment by the relevant age group - usually 18 to 24). Such rates are susceptible to distortion, especially when conducting interprovincial and cross-national comparative analyses. These distortions include: (1) the presence or absence of mature, part-time students over the age of 24 in the university or college population, which then influences the calculation or participation rates; (2) insufficient account of provincial differences with regard to age of entry in the 18-24 age group; (3) participation rates include foreign students and changes in their enrolment within Canadian postsecondary institutions will affect the measured participation rate; (4) the participation rate does not capture students studying in postsecondary institutions outside Canada; (5) some students attend postsecondary institutions outside their home province: this does not affect Canadian rates but does have a noticeable effect on measuring provincial rates (particularly in Nova Scotia and Prince Edward Island) (Vanderkamp, 1984:4-6); (6) counting the participation of part-time students in a rate has been and continues to be a tricky problem.

Each province displays a somewhat unique arrangement in how universities and colleges are structurally interrelated and the relationship within any province of universities and colleges may, as Vanderkamp indicates, have a bearing on university participation rates (1984:16). In recent years those provinces having well developed college systems, show lower university participation rates, though Ontario is an exception. Thus, in calculating university participation rates in British Columbia one should include university transfers from colleges. If this is not done, B.C.'s university participation rates will appear artificially lower when compared with provinces having a small academic transfer program (e.g. Nova Scotia).

Making valid interprovincial comparisons of participation rates is difficult due to a number of other factors as well. These include: (1) variations in the structure of education. For example, students in

Quebec and Ontario normally take 13 years of schooling before being considered eligible for university entrance. While students in Newfoundland were, until 1983, required to complete only 11 years of schooling, students from all other provinces complete 12 years; (2) in six provinces a Bachelor of Arts degree can be obtained in three years while in the four remaining provinces four years are required; (3) in Quebec all "non-mature" students proceeding to university must complete two years of Cégep; this inflates college enrolment statistics and deflates university enrolments in that province; (4) provincial retention rates vary substantially (i.e. persons enrolled in Grade 12 as a proportion of those enrolled in Grade 2) and this has obvious and significant implications in any discussion of accessibility.

These caveats concerning provincial variations in educational structure and organization illustrate some of the complexities involved in making interprovincial comparisons of participation rates. They also indicate that extreme caution must be exercised in making general statements concerning accessibility in Canada.

Conclusions

Chapters 4 through 6 of this report focused on a review of issues and knowledge concerning accessibility to postsecondary education on a province-by-province basis. Though it is true that postsecondary institutions across Canada confront certain common problems that include, for example developing strategies for coping with financial cutbacks and defining the role of foreign visa students, provinces differ in terms of the meaning they attach to accessibility. Each province has had a specific history - resulting from a unique blend of physical environment, political, economic and sociocultural factors. Postsecondary education evolved in the provinces, as a reflection of these histories and, once formed, in continuous and dynamic interaction with these aforementioned factors.

Based on our regional review of access, the following conclusions can be derived:

(1) An understanding of education at the postsecondary level within each province should be preceded by an examination of the educational system as a whole. School retention rates (i.e. persons enrolled in

Grade 12 as a proportion of those enrolled 10 years earlier in Grade 2) vary strongly across the country. According to Dallaire and Belleau in 1981, they ranged from a low of 62.1% in Nova Scotia to a high of 89.6% in Quebec. In provinces where the holding power of school is relatively low, student access at the postsecondary level receives less attention. In Saskatchewan, the educational research conducted (which is more limited than in most other provinces) tends to focus on early school leavers;

(2) The definition and operationalization of access issues are strongly associated with a province's industrial, social and urban development. In the more rural provinces such as Saskatchewan and Manitoba educational researchers and government consider geographical location a key variable in exploring accessibility, be it at the secondary or postsecondary levels. The Atlantic Provinces, suffering historically from high unemployment and a poor economic outlook, have focused on the problems of getting traditional, non-urban males into urban-oriented postsecondary institutions. The postsecondary participation of special groups - women, Natives, ethnic minorities - receive a lower profile than in the more industrialized and affluent provinces (e.g. Ontario);

(3) A point discussed previously, bears repeating - the relationship between the university and college sector has important conceptual and methodological implications for understanding access across Canada. No system of community colleges has yet emerged in Newfoundland and Nova Scotia and colleges are a relatively unimportant part of the postsecondary sector in the remaining Atlantic provinces. Ontario has a separate college system where university transfers are not permitted. This system was designed to cater to general level Grade 12 students. However, in 1983, approximately 25% of college students had a Grade 13 background. Up to now Grade 13 was viewed as a preparation for university. However the boundaries between universities and colleges of applied arts and technology are beginning to blur. While the government's objective may well be to broaden the 25-year-old policy of university access to include guaranteed spots in university or colleges Grade 12 (or general level) graduates could be squeezed out of the colleges when they

fail to compete successfully with their Grade 13 peers. As a result, colleges may be forced to alter their existing goals to accommodate changes in student composition.

In British Columbia and Alberta, the development of the Postsecondary Non-university sector (PSNU) sector was viewed as a democratizing strategy, providing equality of educational opportunity in a period of rapid educational expansion. Studies reveal, however, that college students are a select group, coming from more highly educated and well-to-do families. Moreover, the percentage of students that actually transfer from colleges to universities is extremely low - about 10%;

(4) The social stratification perspective has been explicitly adopted in only a few provinces. Ontario and Quebec show a relatively long history in employing this perspective. In Ontario social class and gender inequalities as related to university participation rates have been and continue to be priority concerns. In Quebec, postsecondary participation rate differences among francophones, anglophones, and allophones have received a great deal of attention. This language variable is seen to be intimately related to socioeconomic differences, given the correlation of language and SES with educational aspirations. It should also be noted that the language variable receives similar attention in New Brunswick and Manitoba. In Western Canada, Alberta's Department of Advanced Education recently released a participation rate study that adopted a stratification approach - analyzing postsecondary participation rates of 18-24 year olds in terms of socioeconomic, income, gender, educational and ethnic group backgrounds of parents;

(5) In Canada there are about two full-time students for every part-time student. This ratio varies strongly across the provinces; in Quebec the proportion is one to one. The emergence of a growing part-time adult clientele was initially seen as a sign that postsecondary education was being democratized and that early school leavers could receive a second chance. Professor Marie-Andrée Bertrand in Chapter 5 indicated that this partialization of postsecondary study is now a serious and growing concern in Quebec. Partialization is related to the accelerated participation of women in university and college and is also linked to one language group - francophones. Moreover, part-time

students are attracted by short, less prestigious programs of study that result not in degrees but certificates or diplomas. What this essentially means is that the so-called second chance may result in a new type of minority group, characterized by limited vocational aspirations;

(6) Canada has slowly moved from a response to access based predominantly on demand to a supply-oriented approach to postsecondary education. Provincial governments are generally under greater pressure to closely monitor the development of postsecondary education and to formulate more precise and explicit guidelines for the future of the entire sector. Growing enrolments and growing deficits have induced government to assume a stronger role in mediating individual demand, the autonomy of postsecondary institutions and the pressures of various professional and academic groups. This is particularly evident in British Columbia and Ontario. It is important to monitor the consequences (especially for economically disadvantaged and minority group members) of such mediating attempts to ensure that Canada continues to move in the direction of democratizing its postsecondary sector should a 'supply-oriented' approach be exclusively adopted, then Canadians may experience a reduction in choice and a movement away from greater accessibility.

(7) The decrease in university funding in most provinces (and especially in British Columbia) has raised debates concerning the "funding-accessibility-quality triangle." These three factors are, as the argument goes, closely interwoven. Skolnik (1984:9-10) summarizes the debate concisely:

Since no one will admit to allowing a decline in quality, funding and accessibility must be traded off against one another. Champions of elitism have come out of the woodwork and argued that since funding levels are constrained, we must limit or reduce accessibility in the name of quality. The proponents of accessibility generally also accept the triangle as a given, but argue that we must double our efforts to get more money from the government in the name of accessibility.

Research on Accessibility: Future Directions

Our review of knowledge and issues regarding access to postsecondary education in Canada reveals a need to formulate more effective research strategies. While access issues are relatively well researched in Quebec

and Ontario, similar research in other regions of Canada is basically underdeveloped. This makes it difficult and, at times, impossible to evaluate equality of postsecondary educational opportunity across provinces. At a more specific level this review suggests that the following areas deserve more attention:

(1) Although over 4 in 10 postsecondary students in Canada are enrolled in colleges, most research studies have concentrated on universities and university students. Postsecondary education has become an increasingly diverse and complex enterprise. More knowledge is needed about who goes to college and why. With reference to equality of condition, what are the occupational consequences of studying at university? College? Also more knowledge is needed about the relationship(s) of colleges and universities within provinces and how this influences access. Have hierarchical arrangements developed among universities and colleges similar to those identified for OECD nations? For example, Guppy (1984) in analyzing accessibility in British Columbia states that what appears to have happened in postsecondary education, in Canada generally as well as in B.C., is a process of bifurcation whereby vocational institutes and community colleges tend to cater to working class and lower middle class students while universities continue as the institution of higher learning for students from upper class and upper middle class families.

(2) Part-time adult students are increasingly becoming an important clientele for postsecondary institutions. Canadian research concerning this student body is infrequent and mostly descriptive. Given the demographic decline of the traditional 18-24 age group, research studies that focus on their motivations and characteristics are needed. At the same time, we should not rule out an increased participation role in the 18-24 age group due to the increased skill requirements in the job market or pressures resulting from unemployment.

(3) More research is needed to trace the history of access to postsecondary education for various socioeconomic, cultural and mother-tongue groups. Census information for 1971 and 1981 has been profitably employed in Ontario and Alberta to evaluate the progress made by such

groups. Its use for other provinces would provide valuable historical comparative data on university and college students.

(4) Our review illustrates that the analysis of postsecondary participation rates across regions may be distorted by any number of factors, including the blend of political, economic cultural characteristics that make each province unique. Multivariate models that incorporate these complexities should be developed and tested employing Canadian data. Very few research studies in this general area employ other than descriptive statistics or basic cross-tabulations. Achieving an understanding of access (as measured by participation rates) frequently requires the analytic use of four or more factors. We recommend, therefore, that future research place greater reliance on multivariate statistical techniques as one strategy for dealing with the complex issue of postsecondary access.

(5) The social stratification perspective adopted in this report emphasizes the importance of a holistic view toward postsecondary access. Who gets to university or college in Canada relates to family, economic considerations, government funding, admissions policies, secondary school structures, academic performance, peer groups, self-esteem and so on. An exclusive focus on postsecondary students will not provide us with a sufficient explanation as to how they arrived. More longitudinal or panel studies (e.g. Les aspirations scolaires et les Orientations professionnelles des étudiants Québécois (ASOPE) are needed to sort out the factors and processes involved in gaining entry to a postsecondary education.

(6) Research studies on questions relating to postsecondary participation should not cease after learning who gains entry. Once students enrol in universities or colleges their academic and social experiences vary enormously. How effective are universities/colleges in opening up greater equality of opportunity for minority group students? Are women, for example, encouraged to pursue non-traditional fields of study? What employment bridges are provided by postsecondary institutions to their future graduates, particularly minority group graduates? A review of literature in this general area reveals few published studies by academics. Moreover, some universities (well known for the higher

caliber of their research activities) show a disinclination to "know themselves" or, if they do, the research is infrequently published.

(7) Critics who have challenged the merits of sustaining access to higher education frequently link the continued promotion of accessibility with decreases in the quality of education. Most of these arguments are based not on hard evidence but supposition. Whether the elite years in Canadian higher education actually produced better students than today's mass postsecondary system is hypothesis rather than fact. We obviously require empirical research to test this hypothesis. Moreover, we need challenge the taken for granted or almost mystical conception of "quality" and begin to develop clear, empirical measures of the concept that make good sense.

Michael Horn maintains that raising admission standards on the presumption that student literacy has declined is not socially neutral. His discussion raises a number of important research issues. Horn (1984:7) states that:

A key issue, it seems to me, is what effect the raising of admission standards or the setting of admission exams has or will have on young people, people who are the first generation in their families to consider going to university, people from homes in which the first language is not English or French, Native peoples, those who come from homes that we might somewhat patronizingly describe as 'culturally underprivileged,' those who have to work hard at part-time jobs in order to help their families, or who have attended schools without strong traditions of sending their graduates on to university? Does it not seem likely that such young people might find getting into university even harder than it already is? And is this desirable?

(8) How governments determine the availability of postsecondary positions for students should be a crucial question for researchers, especially given their important mediating role. What is the planning process like? How do governments (provincial and federal) define and redefine priorities? How do they assess their quantitative, postsecondary requirements and estimate their resource implications? If normative targets for future growth are developed what factors influence their establishment? Are there changing links between secondary and postsecondary education across the provinces? More specifically, do changes in government thinking about the postsecondary sector lead to corresponding changes in the structure of secondary education. The

recent restructuring of secondary education in Ontario is an obvious illustration.

Provincial governments also play a key role in influencing access through their financing of universities. As Michael Skolnik (1984:7-8) indicates, there is considerable variation among the provinces:

During the past decade there has been substantial variation in funding among provinces, with the most prosperous province, Alberta, faring the best, and the two smallest provinces, Prince Edward Island and Newfoundland, faring the worst - next to Ontario . While the figures for 1984-85 are not yet available, it would appear that Alberta is the only province which has not yet had a decline in real operating income per student since the late 1970s. . . . Indications are that funding in real terms has slipped in the last two years for nearly all provinces. The most dramatic case, of course, is that of British Columbia where the government has made sudden and sharp cuts in university budgets along with its massive assault on the public sector.

A closer examination of how provincial variations in the funding of universities (and colleges) influence access by various socioeconomic and cultural minority groups constitutes another direction for future research initiatives.

In concluding, it should be indicated that the 1983-84 Postsecondary Student Survey (described in Chapter 3) provides a national data base for answering some of the research questions raised in this chapter. Socioeconomic, cultural and mother-tongue information regarding full and part-time adult students, university and college students, regional variations in postsecondary studies and graduate levels of study and experiences within postsecondary institutions are all contained within this survey. Moreover, the availability of the 1974-75 Postsecondary Student Survey data affords researchers the opportunity to conduct trend analysis.

These surveys and reports that identify issues in Canadian postsecondary education should then act as a basis for dialogue among major policy makers, researchers and academics. Our key objective in sponsoring this dialogue would be to move Canada in the direction of widening rather than narrowing postsecondary choices while, at the same time, significantly increasing the economic productivity and collective wealth of the nation. We urge educational researchers interested in further clarifying the issues related to student access to explore their

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use by contacting Education Support, Department of the Secretary of State of Canada.

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